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ACORN BRAND SEEDS

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U. S. Department of Agriculture.



The
ROSS
SEED
CO.
WICHITA
U.S.A.

SUGGESTIONS for ORDERING

EARLY ORDERS—Mean that you will have the seeds on hand when you need them. We like early orders because we have more time to care for them. Our rush season comes in the months of March and April.

HOW TO ORDER—Write your name, Post-office, State, and Railroad office, plainly with black ink on every order. Give plain shipping directions, Parcel Post, Express, Freight, or Truck. When definite instructions are not given, we route to the best of our ability at buyer's risk.

USE ORDER SHEETS—By using the order sheet enclosed in this catalog you will help us in handling the order quickly. More order sheets will be sent on receipt of postal card asking for same.

PRICES—The prices quoted in this catalog are in effect when issued and we expect most of them to remain at present figures, but some will fluctuate and we name prices subject to market changes. Should the price decline we will fill order, and remit balance due you. If price advances we will hold your order and write giving lowest quotation at that time.

ABOUT WARRANTING SEEDS—It is not possible to guarantee the crop because good seeds constitute only one factor in the success of the crop. The selection of soil, cultivation, care of growing crop, and weather conditions are equally important and over these we have no control, therefore we, The Ross Seed Company, do not warrant in any way, express or implied, the description, purity, productiveness or any other matter of any Seeds, Plants, or Bulbs sold by us, and we will not in any way be responsible for the crop. If the purchaser does not accept the goods on these terms, no sale is made thereof and the goods must be returned at once and the money paid will be refunded. Subject to the above conditions we make this sale at the moderate prices which we quote in this catalog.

THE ROSS SEED COMPANY Wichita, Kansas, February 1, 1931

Our Pink Price-List is issued during the season, and carries latest prices. We will gladly send it regularly, if asked for.

DOMESTIC PARCEL POST RATES

On Seeds, Plants, Bulbs, Roots, and Merchandise within the U. S. and Possessions. Poisons, and some liquids are not mailable, also some orders are too large when packed to use Parcel Post.

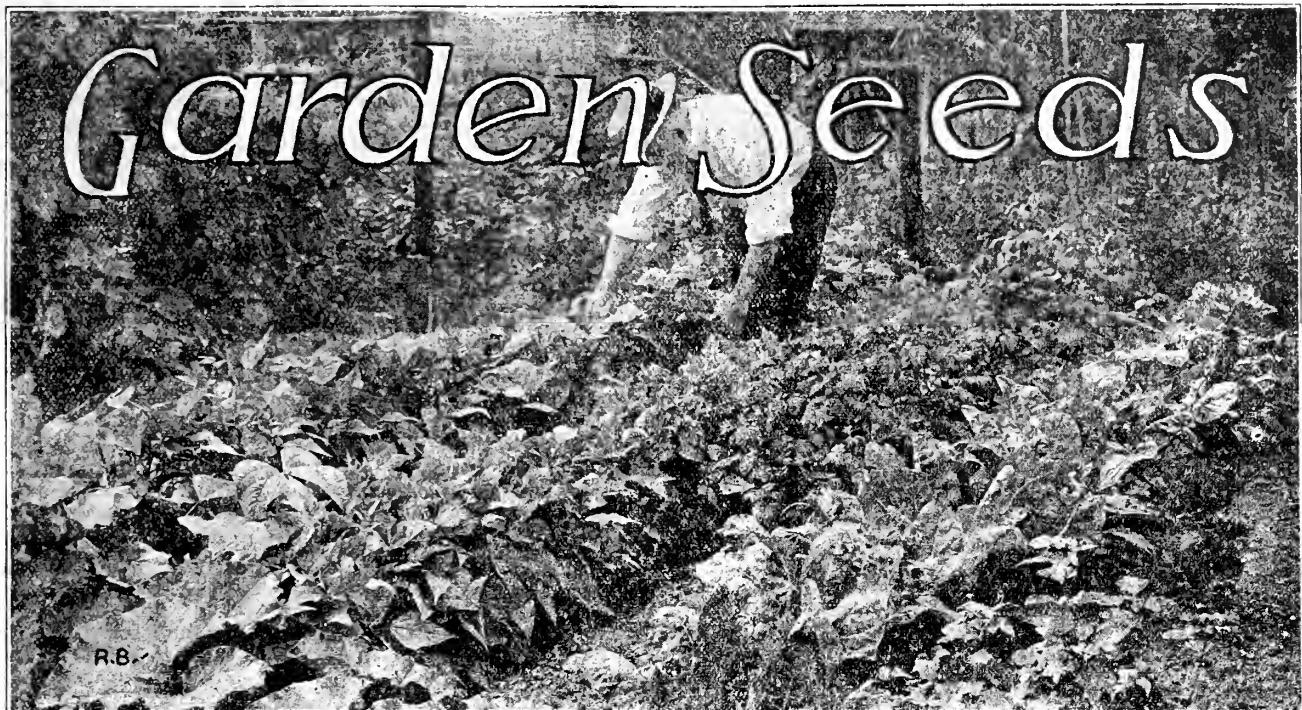
	First Pound or Fraction	Each Additional Pound or Fraction
First Zone Wichita and within 50 miles	7c	1c
Second Zone within 50 to 150 miles	7c	1c
Third Zone within 150 to 300 miles	8c	2c
Fourth Zone within 300 to 600 miles	9c	4c
Fifth Zone within 600 to 1,000 miles	10c	6c
Sixth Zone within 1,000 to 1,400 miles	11c	8c
Seventh Zone within 1,400 to 1,800 miles	13c	10c
All over 1,800 miles	12c	12c

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The POSTPAID PRICES quoted in this catalog apply in the 1st, 2nd and 3rd zones.

Market Gardners, and other large buyers, please send us list of your requirements and we will make special prices.



Garden Seeds

R.B.

Foreword

We come to you with, we believe, a better stock of SEEDS, better balanced for this section of the U. S., selected to please Home Gardeners, Market Gardeners and other particular growers of Flowers, Vegetables, and Farm Crops. The selection of our stock has been carefully done, and the seeds come to us from reliable growers. The cleaning, recleaning and dressing of seeds has been carried through a little more carefully, with new and improved machinery which permits of closer dressings, more thorough cleaning, and naturally the seeds will show a more even performance when planted in the gardens or fields. This is, as it should be, one of the results of 48 years in the Seed Business, in Wichita. When a firm carries on, in one community, for nearly half a century it naturally follows that the seeds, or other merchandise, sold to their customers has been satisfactory. Then too the employees become imbued with the traditions of the firm and give careful attention to the details of the business, which means much to the community it serves. The officers of our firm give personal attention to the character of goods we offer to our customers, every one engaged in supplying your needs is personally interested in your success. Each and all of us invite you to ask for information on subjects that perplex you, and if we can aid you we will be happy. To use the text of 4-H Clubs, "we wish to make the best, even better." This you can help us do.

We hope you will be healthy and prosperous in 1932.

THE ROSS SEED CO.
Wichita, Kansas
Since 1884

Dial Phones 4-8321, 4-8322

ASPARAGUS

One Ounce Will Produce About 200 Plants

CULTURE—Asparagus from the home garden is one of the most delicious and earliest of crops. It may be grown in any deep, rich soil, either from seeds or roots.

SEED PLANTING—Asparagus may be raised from seed and a crop obtained in three years. In early spring sow the seed, after soaking it twenty-four hours in warm water in drills about 12 inches apart and cover one inch. The following spring, select the best of the roots and place in the permanent bed.

ROOT PLANTING—A year may be saved by buying the plants and setting them at least 2 feet apart in the row, and the rows not closer than 3½ feet, see that the roots are well and evenly spread out in planting so the plant will have a well balanced root system.

WHITE ASPARAGUS—White Asparagus may be grown from the same variety as green. It is merely a method of growing. The roots are covered deeper and the stalks are cut underneath the ground before exposure to the light has turned them green.

MARY WASHINGTON—Is so far, the most satisfactory of the Washington Rust Resistant Asparagus. Rustproof plants are being generally accepted by commercial growers, since the difference between varieties of Asparagus are not great, given the same soil and cultivation. Assurance of freedom from disease is of utmost importance in the selection of planting stock. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50, postpaid.

EARR'S MAMMOTH—The large green stalks of this are tender and delicious. Pkt., 5c; oz., 20c; ¼ lb., 40c; lb., \$1.25, postpaid.

CONOVER'S COLOSSAL—A large, fast growing sort. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00, postpaid.

PALMETTO—The old favorite, light-green variety. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00, postpaid.

	2-Year-Old		
	Doz.	100	1000
Mary Washington	\$0.50	\$2.00	\$17.50
Palmetto	.35	1.50	11.00

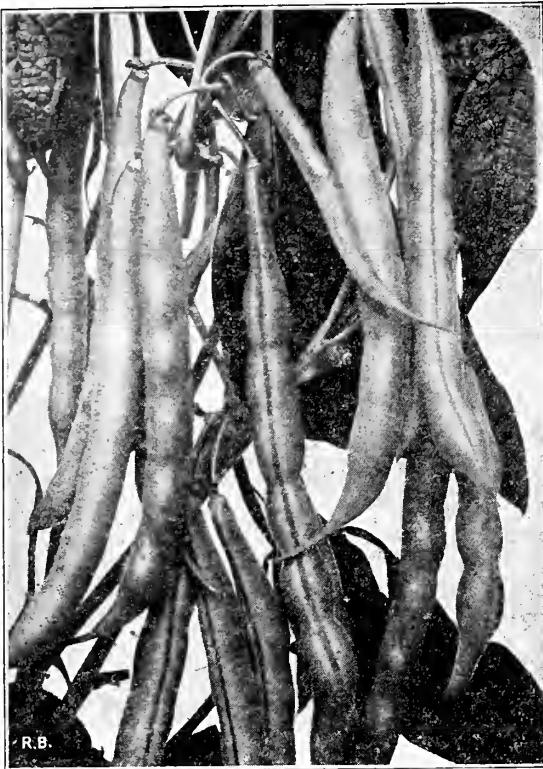
F. O. B. Wichita. If wanted by parcel post add 8c doz., 40c 100.

FIELD BEANS

NAVY OR FEA BEAN—It is a sure cropper and best for family use. The plants are large and spreading and mature their small well filled pods quite early. Baked, they make one of the most wholesome and delicious dishes on the tables of the country today. Pkt., 10c; lb., 20c; 2 lbs., 35c; 10 lbs., \$1.50, postpaid.

PINTO—From Santa Fe, New Mexico, to Brownsville, Texas, this variety is unexcelled. In the higher altitudes, or lower places, where it is too dry for ordinary beans, this variety is a sure yielder. Its average yield runs from eight hundred to one thousand pounds to the acre and we have seen yields of nineteen hundred pounds to the acre. Pkt., 10c; lb., 20c; 2 lbs., 35c; 10 lbs., \$1.50, postpaid.

Early Orders mean prompt shipment from complete stocks.



Stringless Green Pod

BLACK WAX IMPROVED PENCIL POD—This is exceptionally productive, hardy and of the best quality. It is extensively used as snaps in the home garden. The vigorous plants bear the medium sized pods well up. The seeds are small and black, the round pods yellow and fleshy. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

DAVIS WHITE KIDNEY WAX—Vines vigorous and prolific, bear handsome waxy white pods 7 inches long; the finest appearing of all early wax beans. They should be used while young, when free from strings. Pkt., 10c; lb., 40c; 2 lbs., 75c; 5 lbs., \$1.50, postpaid.

Bush Lima Beans

The home of the Lima is in the tropics and consequently it must not be sown until after the ground is thoroughly warm in the Spring and there is no danger of additional cold weather. Lima Beans should always be sown eye down. Lima Beans are even richer in food value than Green Beans and are entirely too delicious and easily grown to be left out of either city or country gardens. Separate sorts are not needed for winter use. Just ripen and dry the surplus on the vine and store in a dry place until wanted in the winter.

HENDERSON'S BUSH LIMA—Always early on the market and therefore, sure of a good price. This is the earliest variety, being fully two weeks ahead of any other sort in maturing. The City Farmer, anxious for an early taste of fresh butter beans on his table, and the Country Farmer keenly alive to the high prices paid for early vegetables, will both appreciate this bean. This is one of the few varieties that acclimates itself to both north and south. The beans are small and very fine for canning. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

BURPEE'S BUSH LIMA—The bush form of the large White Lima. The plants are quite hardy and productive. The medium green pods contain three large flat beans of fine quality. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.35, postpaid.

Pole Limas

KING OF THE GARDEN LIMA—A vigorous grower and very prolific. Pods are from 5 to 8 inches long. On account of its immense pods it is a favorite with market gardeners. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

BEANS

One Pound Will Plant About 75 Feet of Drill

CULTURE. Sow when the apple is in bloom and the ground has become dry and warm, and repeat every two weeks until within 50 days of frost. In field culture sow in drills three feet apart. For garden use, where the cultivation is to be done by hand, the rows may be only two feet apart. Plant two inches deep and thin out to six inches apart. Beans make better crops when inoculated with Nitragin; see page 61.

Green Pod Bush Beans

BURPEE'S STRINGLESS GREEN POD—The first on the market and the best. The sturdy erect bushes bear heavily from early June until late, when other less hardy sorts barely survive. The large, light green pods are absolutely stringless, attractive in appearance for canning and of delicious taste. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

GIANT STRINGLESS GREEN POD—Similar to Burpee's Stringless, but pod is longer, straighter and more slender, and slightly lighter in color. Early, productive, hardy and of highest quality. A desirable canner's variety, and excellent for home garden. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

BOUNTIFUL—This bean has a long flat pod instead of a round pod like the Stringless Green Pod variety. Bountiful has wonderful quality, absolutely stringless, early and prolific. Pkt., 10c; lb., 35c; 2 lbs., 65c; 5 lbs., \$1.35, postpaid.

FULL MEASURE—A main crop variety of bush beans—a Stringless Round Green Pod Bean, and on account of superior quality and productiveness is growing in popularity each year. Pkt., 10c; 1 lb., 35c; 2 lbs., 65c; 5 lbs., \$1.35, postpaid.

EARLY RED VALENTINE—Pods green, are ready for use in 45 days from date of planting. Pkt., 10c; lb., 40c; 2 lbs., 75c; 5 lbs., \$1.50, postpaid.

Wax Pod Bush Beans

WARDWELL'S KIDNEY WAX—The strong vines yield straight, broad, creamy-white pods. They are of fine flavor and a fine variety for the market gardener. Matures a little later than the Golden Wax. Seed kidney shaped white with dark markings about the eye. Pkt. 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

IMPROVED GOLDEN WAX—A medium early and heavy cropper. Vines of vigorous bushy growth, a good rust resister. The flattened pods are golden yellow, fleshy and solid, brittle, waxy texture, excellent for home and market garden. They have an exquisitely rich butter flavor peculiar to this variety. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

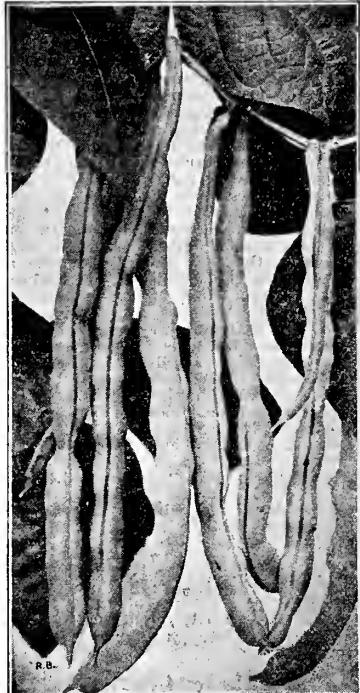
Pole Beans

KENTUCKY WONDER WAX—Eight or nine inches is an average length for this Bean. The long pods are broad, very fleshy, and as stringless as Snap Beans. Its earliness and hardiness commend it as a Pole Bean, well adapted to the middle west and southern latitude. Its golden yellow pods are very large, delicious for eating and of beautiful appearance when canned. In quality they are not excelled by any wax podded bean of its class. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

KENTUCKY WONDER OR OLD HOMESTEAD—This is the best of the green podded pole beans for snaps. The vigorous vines are good rapid climbers and bear the showy pods in large numbers. These are ten inches in length, crisp when young though they become quite tough if allowed to remain on the vines too long. We are glad to be able to offer our carefully selected stock of this variety. Pkt., 10c; lb., 30c; 2 lbs., 55c; 5 lbs., \$1.25, postpaid.

RED SPECKLED CUT SHORT—(or Corn Hill)—A well known, hardy, late and productive sort. Pods 3½ to 4 inches long, stout, straight and flat, fine grained and fair quality, color light green. Pkt., 10c; lb., 35c; 2 lbs., 65c; 5 lbs., \$1.35, postpaid.

LAZY WIFE—Receives the name from the fact that a basket full may be picked from only a few plants. The broad flat pods are dark green, five to six inches long. The round, white beans are found six to eight to a pod. Pkt. 10c; lb., 35c; 2 lbs., 65c; 5 lbs., \$1.35, postpaid.



Kentucky Wonder

BEETS

One Ounce Will Sow 50 Feet of Drill
Six Pounds for an Acre

EVERY country and city housewife appreciates the value of beets. No boiled dinner is complete without beets. Many salads and dressings are made from them. Canned or pickled beets furnish a delicate dish all through the winter and early spring, and in addition to this there is no vegetable more easily raised. The beet grows in hot dry weather or in cold wet weather, or in weather in between. If you use Acorn Brand middle west seed, there is no excuse for not raising a good crop.

CULTURE. Sow as early in the spring as the ground can be worked, and every two weeks after for a succession, up to the first week in August. The soil should be light, sandy loam, well enriched with stable manure, and plowed and harrowed until very fine. Sow in drills one foot to 18 inches apart for garden culture, and when well up thin out plants to three or four inches apart. The young beets pulled out of the rows are excellent when served as Spinach.

DETROIT DARK RED—For canning, the attractive color and tenderness makes this a most desirable variety. The smooth medium sized roots are a dark blood color, firm fleshed with lighter shaded zones. The tops grow straight up allowing for close rows which is a big advantage in small gardens. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 75c, postpaid.

BOSTON CROSBY—An exceptionally good selection from Crosby's Egyptian, more globular with a smaller top and tap root. Roots remarkably uniform, very dark red, flesh purplish red, with little tendency of zoning. One of the most popular and handsome of the early Beets. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$85c, postpaid.

EARLY BLOOD TURNIP — The flavor is sweeter than that of any other early beet. The roots are of medium size, a dark red shade, which color is retained when cooked, making them particularly valued. The roots are of rapid growth, putting them on the market at an early date, as well as insuring an entire absence of fibre. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 75c, postpaid.

LONG DARK BLOOD—A real heat and dry weather resister. In good soil the roots are 10 to 12 inches long, being always sure of moisture. The flesh is tender and sweet. A fine sort for pickling. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 75c, postpaid.

EARLY FLAT EGYPTIAN—The best variety for first early crop. Roots dark red, rounded on top, flat underneath. Small tops. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 75c, postpaid.

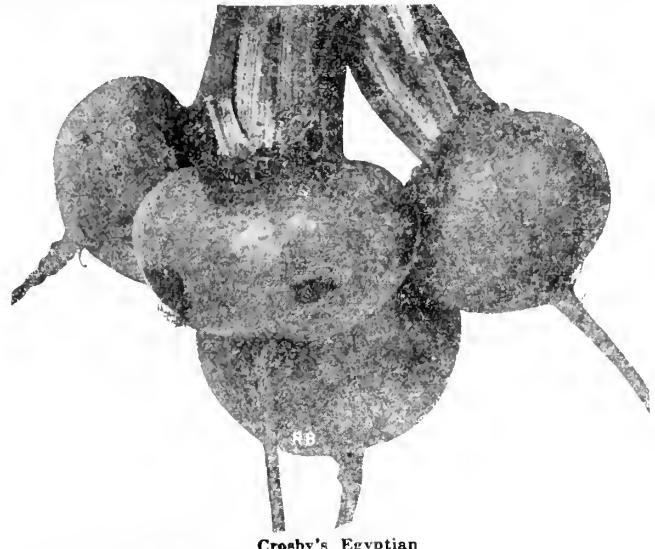
CRIMSON GLOBE—Extremely handsome; early normal crop variety of medium size. The roots are almost globe-shaped and free from rootlets, leaving the skin entirely smooth. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c, postpaid.

Sugar Beets

Absolutely the cheapest food for milk cows a farmer can raise! A strong statement, but one we are sure of. It is not uncommon to raise from four to six times the tonnage that Alfalfa would yield, or up to 10 times as much as other hay crops. The labor of raising them is not high, and the food value is just right for the cows. Raise an acre of them this year, and watch the feed bill diminish.

CULTURE. Handle in the same way as Mangels.

KLEIN WANZLEBEN—This is the variety so extensively planted for Sugar factories. The roots are a little larger than most varieties, as well as harder and more easily grown. Yields from 12 to 18 tons per acre. Oz., 10c; 1/4 lb., 25c; lb., 65c; 5 lbs., \$3.15, postpaid.



Crosby's Egyptian

CROSBY'S EGYPTIAN—This is the earliest of the large turnip shaped beets, being only a few days later than the small extra early varieties. This is the best beet for the city garden and the best beet for the home table. It is attractive, vermillion in color, delicate in flavor and of particular interest to the farmer and one of the surest sellers on the market. Pkt. 10c; oz. 15c; 1/4 lb., 30c; lb., 75c, postpaid.

Mangel Wurzels

STOCKMEN will find this variety very rich in carbo-hydrates for feeding stock. These yield from 20 to 30 tons to the acre and in many cases far greater yields than this have been grown under favorable conditions. Mangel Wurzels not only serve as a nutriment but make a succulent roughage to supplement the heavier dry rations. It is of especial value to milch cows and increases the supply of milk from 10 to 25 per cent.

CULTURE. Mangels require a deep soil to grow well; plow and subsoil at least 16 to 18 inches and apply stable manure, or complete fertilizer. Sow in May or June (five or six pounds to the acre), in rows two feet apart and thin out the plants nine or 10 inches apart in the row. Young plants may be transplanted to fill up vacancies. The use of complete fertilizers will prove of great benefit to the crop, if applied when the plants are three to five inches in height. The quantity per acre should be determined by the character and condition of the soil. Dig the crop after the first heavy frost. Store in a well ventilated root cellar.

MAMMOTH LONG RED—A truly mammoth variety for stock-feeding purposes. A single root often weighs 30 or 40 pounds, and occasionally more. In yield it is enormously productive, 30 tons per acre being nothing uncommon. It grows well above the ground and on account of its shape is easily pulled up. Oz. 10c; 1/4 lb. 20c; lb. 55c; 10 lbs. \$4.00, postpaid.

GIANT HALF SUGAR—Roots are reddish yellow. A heavy yielder.

GOLDEN TANKARD—The most nutritious variety.

Prices of either of the above: Oz., 10c; one-fourth lb., 25c; lb., 65c; 5 lbs., \$3.00, postpaid.

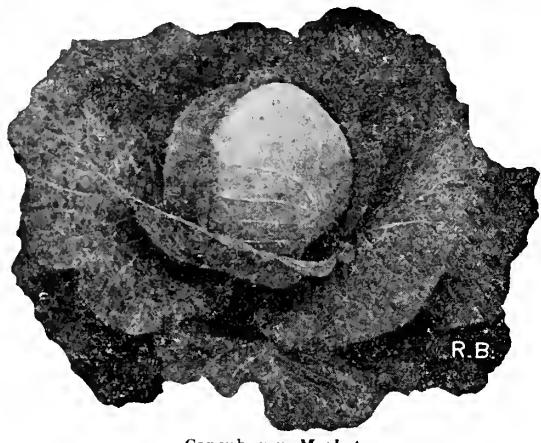


Giant Lucullus

Swiss Chard

A summer, winter green. Both city and country farmers should plant at least one row of this dandy green. It takes only a short time from the planting until the white ribbed leaves are ready for a mess of greens and you can pick, pick all summer. Swiss Chard will furnish greens for you from early spring until late frost from the same plants. A hard frost in the fall will probably crumple up outer leaves but if warm weather should follow, inner shoots will come out and give you greens until real winter sets in. The leaves are used as boiling greens and are superior to the best of Spinach for this. The large white stalks may be served like Asparagus and are fully as tender and tasty.

GIANT LUCULLUS—The stalks of this are as thick as those of Rhubarb, being one and one-half inches broad and about 10 to 12 inches long below the leaf. The large heavy leaves are of fine flavor. A distinct advantage of this sort is the rapidity with which it sends out new leaves after a heavy picking. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c, postpaid.



Copenhagen Market

CABBAGE

One Ounce will Produce about 2,000 Plants

CULTURE. Soil for cabbage should be a rich heavy loam, with good drainage. Such a soil when supplied with a liberal quantity of stable manure and complete fertilizers will produce excellent crops. For early spring transplanting, seed should be sown in boxes in the house between December 25th and January 25th, and should be transplanted into other boxes as soon as the plants are two inches tall. They should again be transplanted into cold frame and then set in open ground about March 10th to 20th. The two transplantings are necessary to produce strong plants that will grow vigorously after set in the open ground. Second early varieties of cabbage should be started in boxes about February 1st, and transplanted twice and set out in open ground during first half of April. If late varieties are planted they should be ready to set out in open ground during the month of May. The plants of early varieties should be set in rows two feet apart and 18 inches apart in the row; medium and late varieties in rows three feet apart and from 18 to 24 inches apart in the row, depending upon growth of the variety.

GOLDEN ACRE—It is very uniform, almost every head could be cut at the same time. Golden Acre matures quicker than any other variety. The head is of medium size, quite round, and is surrounded by a few small outer leaves. It is firm and fully equal to any of the later sorts in this respect. Pkt., 10c; oz., 40c; 1/4 lb., \$1.25, postpaid.

COPENHAGEN MARKET—Extra early, the heads are nearly round, very hard and heavy; of compact growth, with few outside leaves, so the plants may be set close together. Copenhagen Market heads as soon as Jersey Wakefield cabbage. Every plant under normal conditions will produce a good, solid head. The heads mature all at the same time so the crop can be cleaned up within a short time after the first heads mature. Pkt., 10c; oz., 30c; 1/4 lb., 80c, postpaid.

SELECTED EARLY JERSEY WAKEFIELD—The first early cabbage for home and garden. It is the surest heading of the early cabbages and for this reason brings a good price on the market. The plants are very hardy and will resist cold weather and other unfavorable conditions. The heads are of medium size, solid, uniformly pointed and of good quality. Pkt., 10c; oz., 25c; 1/4 lb., 65c, postpaid.

EARLY DWARF FLAT DUTCH—The most reliable for early planting. Pkt., 10c; oz., 25c; 1/4 lb., 65c, postpaid.

CHARLESTON, OR LARGE WAKEFIELD—Large solid pointed heads, remarkably early and of a flavor that everyone likes. Quite similar in many ways to the Early Jersey Wakefield, but much larger and a week later in maturing. The heads are uniform, weighing close to ten pounds each; not as conical as the Jersey Wakefield, but a good shape for packing. The heads are firm and solid. Pkt., 10c; oz., 25c; 1/4 lb., 65c, postpaid.

ALL HEAD EARLY—A reliable early header, with a deep flat head, solid, and uniform in color, shape and size. In tenderness it is unsurpassed. It is in great demand in Kraut sections, and in fact is a popular sort the country over. It is frequently used as a late cabbage, as well as early. Pkt., 10c; oz., 25c; 1/4 lb., 65c, postpaid.

DANISH BALLHEAD—A splendid early sort. Pkt. 10c; oz., 30c; 1/4 lb., 75c, postpaid.

SURE HEAD—Dependable in the worst of seasons. Pkt., 10c; oz., 25c; 1/4 lb., 65c; postpaid.

PREMIUM LATE FLAT DUTCH—As a variety for winter market this cabbage has no superior. The heads are large, round, solid, broad and flat on top, often tinted with reddish brown after being touched by frost. They open white and crisp, are tender and well flavored. It is a fall and winter variety and one of the best keepers. Pkt., 10c; oz., 20c; 1/4 lb., 50c, postpaid.

PERFECTION DRUMHEAD SAVOY—The plants upright and compact. Heads are large. Pkt., 10c; oz., 20c; 1/4 lb., 50c, postpaid.

MAMMOTH RED ROCK—The best and largest red cabbage. Used for pickling. Pkt., 10c; oz., 40c; 1/4 lb., \$1.00, postpaid.

Cauliflower

Sow One Ounce to Produce About 2,000 Plants

CULTURE. Cauliflower will grow on soils well adapted to cabbage, and the same methods of cultivation will answer, varying with the different climatic conditions. The seeds are sown in boxes or hotbeds. The plants must be put out in the open ground just as early as danger of freezing has passed. Rapid cultivation is necessary to bring the plants to head before hot weather. The heads will be improved if the leaves are tied over them when beginning to form.

EARLY SNOWBALL—There is no finer Cauliflower than our first-class strain of this variety. The heads are large, heavy and close grained, with no leaves growing through them. Pkt., 10c.

Carrots

One Ounce Will Sow 100 Feet of Drill
Three to Four Pounds for an Acre

CULTURE. For the best results the soil should be thoroughly worked to a good depth. For early use sow the seed in rows 15 inches apart as early in the spring as the soil can be worked, being careful not to cover the fine seeds too deeply, using four pounds to the acre. The seed is a slow germinator and many gardeners like to mark the row with a dash here and there. These come up quickly and allow for cultivation long before the carrot seeds are started. The seed should be well firmed in the ground after planting. The small home gardener finds an easy way to do this is to shuffle along the row thus treading on every spot of earth. For the main crop sow about four pounds to the acre or one ounce to 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate frequently until the roots are large enough for table use, and if grown for commercial uses they may be cultivated with profit throughout the season. When the plants are three inches high, thin to two inches apart in the row.

EARLY SCARLET HORN—This variety is the first crop ready for the table in the home garden. The earliness of it makes it very valuable for growing under glass. The tops are small, dark green. The orange-red roots are short and top-shaped, and when picked while young they are very tender. Pkt., 10c; oz., 20c; 1/4 lb., 60c; lb., \$1.25, postpaid.

CHANTENAY—It is stump rooted, slightly tapering towards the bottom, very smooth skin, orange-red in color. Excellent flavor being very crisp. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.10, postpaid.

IMPROVED LONG ORANGE—Long rooted sort for a field crop. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.00, postpaid.

OXHEART OR GUERANDE—The flesh of this variety is bright orange, fine grained and sweet. They are very fine for table use. This fine and popular carrot is intermediate between the oblong varieties and the scarlet horns, but is much thicker than the latter, being 2 1/2 inches in diameter at the top. Another advantage of this variety is the small amount of time and inconvenience required in digging. It is easily pulled, making it particularly desirable for stiff soils. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.10, postpaid.

DANVERS HALF LONG—Yields more heavily than any other variety and will grow in all soils. Of good size, stump-rooted and cylindrical shaped. Much more easily harvested than any long rooted variety. The Acorn Brand strain of this valuable vegetable is selected with great care and is sure to give entire satisfaction. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.10, postpaid.

Brussels Sprouts

One Ounce Will Produce About 1,500 Plants

A delicious vegetable that is becoming very popular in all large markets. It should be more largely grown in private gardens, as it affords fresh green sprouts in the late fall and winter when other vegetables are gone. It is cultivated like cabbage.

DWARF IMPROVED—This low growing sort is the Paris favorite, as well as the most popular in this country. The plants are from 18 to 24 inches tall and produce compact rounded, grayish green sprouts of good size and fine quality. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c, postpaid.

Chicory

One Ounce to 100 Feet of Drill

CULTURE. Sow seed in early spring just as for carrots, in rows 12 to 16 inches apart, and thin the plants to two or three inches. To blanch the leaves for salad in winter, dig the roots in the fall, cut the leaves off a little above the root crown and place them horizontally in layers, alternating with layers of sand or loam in a dark cellar, the tops all pointing outwards from the sloping heap.

LARGE ROOTED—The dried roots are roasted and mixed with coffee, or used as a substitute. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c, postpaid.

Collards

One Ounce Will Produce About 2,000 Plants

This is a type of cabbage grown for winter use in the Southern States, both to furnish a large amount of green forage for stock and also fine boiling "greens" for table use. The young leaves at the top of the stalk form a loose head and furnish the portion for table use, being very tender and delicate in flavor when boiled.

SOUTHERN OR GEORGIA—This variety is the old-time favorite. Very hardy, standing winters as far north as Tennessee. In many places where the soil is too poor to grow cabbage. Collards grow easily and make a good substitute for Cabbage. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c, postpaid.

Corn Salad

Three Ounces to 100 Feet of Drill

Used for "greens" like Spinach or as a salad. Can be sown in the spring and fall. Succeeds best when sown in the early spring and in August. Can be sown in September and wintered like spinach if given a little protection.

LARGE ROUND-LEAVED—The best variety. Matures in four or five weeks. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c, postpaid.

Egg Plant

One Ounce Will Produce About 1,000 Plants

Owing to their extreme tenderness, egg plants should not be set out in the garden much before the middle of May. This vegetable may well be planted in soil heavily manured for some earlier crop such as radishes. Sow in a hotbed about April first. Transplant into another bed, and later shift into four or five-inch pots. In warm, settled weather transfer to the garden, setting the plants two by three or three by three feet. Conservation of moisture is important. One ounce of seed will produce about 1,000 plants. We are glad to supply well grown plants during May and June.

BLACK BEAUTY—The best of all. Fruits large, handsome shape and of a rich glossy black. It is as early as any, very productive and thornless. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.60, postpaid.

NEW YORK IMPROVED PURPLE—Plants stocky and low branching, stalks entirely free from spines, and produce continually handsome, deep purple fruits of largest size and most perfect symmetry. The plants usually bear eight to ten immense fruits of the finest quality before being killed by frosts. Pkt. 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.60, postpaid.

Broccoli

One ounce will produce about 1,500 plants.

A vegetable similar to cauliflower, of less delicate flavor, but harder. Of value in latitudes where cauliflower does not do well.

PURPLE CAPE—This has purplish heads and resembles the Algiers Cauliflower in habit of growth. Pkt., 15c; $\frac{1}{2}$ oz., 40c; oz., 75c, postpaid.

Cress

One Ounce to 75 Feet of Row

EXTRA FINE CURLED—(Also called "Pepper-grass"). Leaves finely cut and curled. Very handsome and of a pleasant pungent flavor. Used largely in salads. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c, postpaid.

Celery

One Ounce Will Produce About 4,000 Plants

Sow seeds in boxes for early planting; later plants may be produced from seeds sown in frames or open ground. Transplant four inches apart, when three inches high; water and protect until well rooted, then transplant into rows for garden culture 18 inches to two feet apart; for field culture, in rows four to six feet apart; set the plants from eight to 12 inches apart; supply plenty of moisture and see that plants receive thorough cultivation. They may be set either on the surface or in well manured trenches one foot in depth. To blanch, draw earth around the plants, being careful not to cover the tops of the center shoots. It cannot be emphasized too strongly that celery, in the dry sections of the middle west must not be set out till late in the summer. In this vicinity that means between July 25 and August 5.

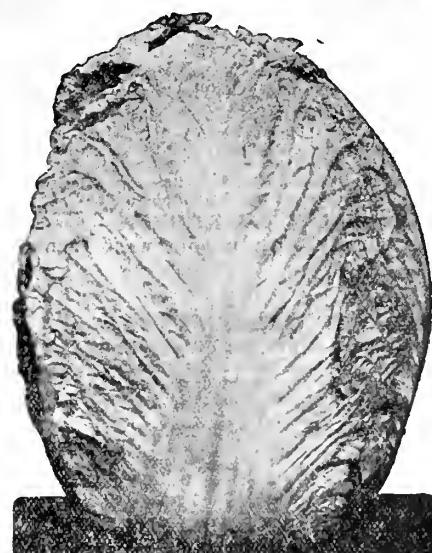
GOLDEN SELF-BLANCHING—The choicest sort of delicious celery; it excels all other yellow varieties. More dwarfed, larger bunches with broad, heavy stalks, which blanch into a rich appetizing, golden yellow, make this the most popular golden celery on the market. Though the stalks are broader and heavier than the white varieties, the quality in sweetness, tender crispness, delicious flavor and absence of strings, make it a most delightful table necessity. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50, postpaid.

WHITE PLUME—A mighty fine variety. No other celery naturally turns white upon reaching maturity. All others require blanching with boards or with earth. The Golden Self-Blanching turns yellow, but this one turns white. Not only does the stem whiten, but the leaf itself, especially every inner leaf, assumes the attractive white color. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00, postpaid.

CELERIAC—Or Turnip Rooted Celery. Useful for salads, and for flavoring. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00, postpaid.

Pe Tsai or Chinese Cabbage

Pe-Tsai will not thrive in hot weather so planting should not be made until after the first of August. The seed is then sown in frames and transplanted like cabbage, or it may be sown directly where it is to be raised. The heads resemble those of well formed Cos Lettuce. The inner leaves blanch quite easily. The large midribs are crisp and blanch much like celery. We strongly recommend it to our customers. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00, postpaid.



(Pe-Tsai) Or Chinese Cabbage

DUBAY SEMESAN applied in dust form to vegetable seeds control fungus growths and give better plants. See page 62. All prices subject to change without notice.

SWEET CORN

One Pound Will Plant 100 Hills, or
250 Feet of Row

CULTURE. Plant upon arrival of settled warm weather in rows three to four feet apart according to variety, placing the seeds two inches deep and eight inches apart in the row, or six grains in a hill three to four feet apart each way. Cultivate and keep free from weeds and when the plants are well established thin to four stalks in the hill. Plant early varieties in succession or plant early, medium and late varieties at one time which will continue the season for several weeks.

EARLY VARIETIES

EARLY ADAMS—An exceptionally hardy and early sort. While it belongs strictly to the field corn class, it is used extensively as a first early table corn. Pkt., 10c; lb., 20c; 2 lbs., 35c; 10 lbs., \$1.50, postpaid.

GOLDEN SUNSHINE—An extra early type of Golden Bantam, maturing seven to ten days earlier. More dwarf. Ears $6\frac{1}{2}$ inches long, 12-rowed, broad yellow sweet grains. Very desirable. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.75, postpaid.

60-DAY WHITE—A fine early corn with decided merit for the market gardener, stalks about $3\frac{1}{2}$ feet high. Ears 6 to 7 inches long, blocky, 12 to 14-rowed with white grains. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.25, postpaid.

BRAZILIAN OR STOOLING FLOUR CORN—Stools like wheat, each kernel produces three to eight stalks. Each stalk produces one to three ears. Ears five to seven inches in circumference, nine to 12 inches long. Color, a beautiful white. Pkt., 10c; lb., 25c; 2 lbs., 45c; 10 lbs., \$1.75, postpaid.

HICKORY KING—Not a sweet corn, but largely used for table corn. Pure white kernels of large size, grown on a very small cob. Can also be planted in June and July for late crop. Pkt., 10c; lb., 20c; 2 lbs., 35c; 10 lbs., \$1.25, postpaid.

GOLDEN BANTAM—Ears of this delicious corn are from six to seven inches long, eight rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It may be planted with perfect safety from ten days to two weeks earlier than most other varieties. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.25, postpaid.

growth, with large well formed ears and one of the best growers to be had. The ears will retain their freshness and be suitable for cooking for a long time. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.25, postpaid.

COUNTRY GENTLEMAN—Is a late main crop variety. The ears are 7 to 9 inches long, borne on stalks 6 to 7 feet high. Cob small, white and densely covered with long, slender white grains, without row formation. Deliciously sweet and tender. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.25, postpaid.

Write for prices on larger quantities or refer to latest Pink List

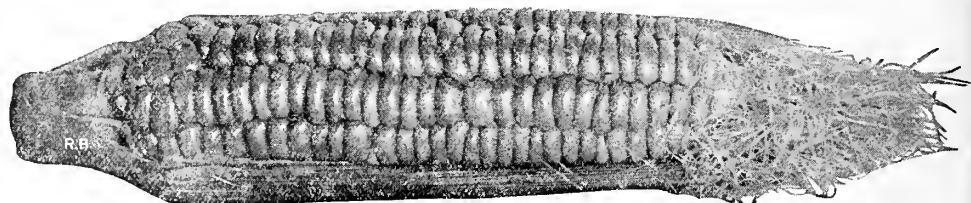
POP CORN

QUEEN'S GOLDEN—A smooth yellow variety that is very prolific and of excellent quality. Grains pop perfectly white and large. Ears six inches long and well filled. Kernels smooth and of a rich golden color, cob white. Usually bears two ears to a stalk. Lb., 20c; 2 lbs., 35c; 10 lbs., \$1.25, postpaid.

DYNAMITE—The large, almost round, yellow kernels pop out about the diameter of a nickel, are yellowish white. Pkt., 10c; lb., 25c; 2 lbs., 45c; 10 lbs., \$1.75, postpaid.

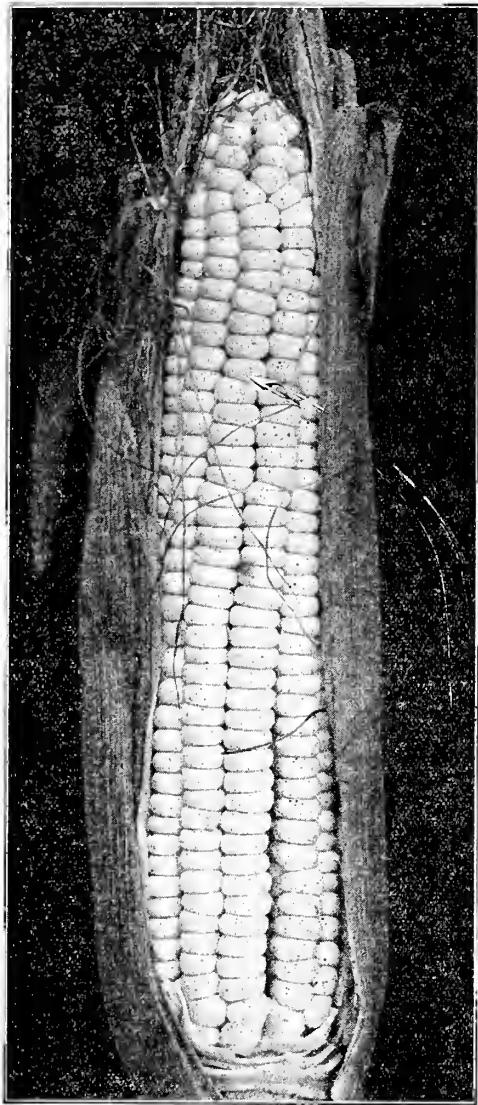
JAPANESE HULLESS—Quite distinct from any other sort. The white kernels are shaped much like the White Rice, but are only about half the size. Being entirely free from hulls many people prefer this. Lb., 20c; 2 lbs., 35c; 10 lbs., \$1.25, postpaid.

SNOWBALL—A large white corn similar to Dynamite in size and quality and quality of kernels. We recommend this variety to those wishing better quality in popping corn. Pkt., 10c; lb., 25c; 2 lbs., 45c; 10 lbs., \$1.75, postpaid.

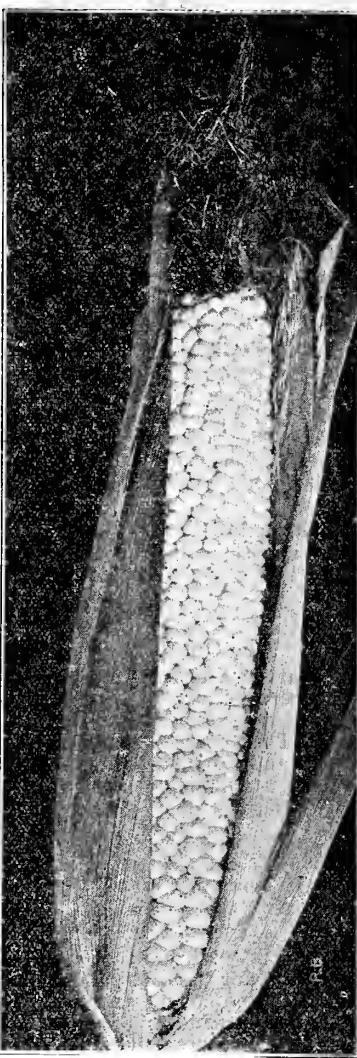


Golden Bantam

All Prices Subject to Change Without Notice



Stowell's Evergreen



Country Gentleman

CUCUMBERS

One Ounce Will Plant Fifty Hills; Two Pounds for an Acre

To obtain the largest yield of cucumbers, the soil should be well enriched with a complete fertilizer or well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed not over an inch deep in hills 4 to 6 feet apart each way, dropping 15 to 20 seeds in a hill. After the plants begin to crowd and danger from the striped beetle is pretty well over, thin to three plants to the hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. In field culture, plow furrows 4 feet apart and similar ones at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure which should be well mixed with the soil, forming a broad, flat hill 4 to 6 inches above the surface. Many growers omit every fourth row, thus forming paths for the distribution of manure and gathering the fruit. In many sections where earliness is very important, market gardeners start plants in boxes made like the ordinary berry box, but without the raised bottom. The boxes are set in hotbeds or cold frames, filled with rich, friable soil and the seed planted. When danger of frost is over, the plants are set in the open ground, the boxes being cut away so that the roots are not disturbed at all.

EARLY FORTUNE—One of the best cucumbers for the market. Fruit is slightly tapering and about nine inches long. The firm, crisp, thick flesh is very white and has very few seeds. Early Fortune has a rich, dark green color which does not fade when shipped to distant markets. The vines are vigorous, very productive and blight resisting. Pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$1.25, postpaid.

EARLY CLUSTER—Extra prolific sort; setting its fruits in clusters of two or three. The fruit is a dark green, short and particularly suitable for pickles. Pkt., 10c; oz., 15c; 1/4 lb., 40c; lb., \$1.15, postpaid.

CHICAGO PICKLE—Largely used by pickle manufacturers. Prolific, short, with fruit of medium size, dark green color, and with prominent spines. Pkt., 10c; oz., 15c; 1/4 lb., 50c; lb., \$1.25, postpaid.

JAPANESE CLIMBING—The strong vines throwing out numerous tendrils, can be trained upon a trellis or poles, which will insure earlier ripening and a straight, handsome form in the large fruits. Pkt., 10c; oz., 15c; 1/4 lb., 50c; lb., \$1.50, postpaid.

LONGFELLOW—An excellent long, slender, dark green variety equally as desirable for greenhouse forcing or outdoor culture. An ideal type for the private garden, or as a "straight pack" variety for shipment to market. Twelve to 14 inches long by 2 1/2 inches in diameter. Pkt., 15c; oz., 40c; 1/4 lb., \$1.00; lb., \$3.50, postpaid.

IMPROVED LONG GREEN—Most widely cultivated sort; unsurpassed for general use. The cucumbers average 10 inches long when fully developed, and are fine for slicing. The smaller fruits make excellent pickles. Pkt., 10c; oz., 15c; 1/4 lb., 50c; lb., \$1.50, postpaid.

DAVIS PERFECT—A superb variety. Dark glossy green, slim and symmetrical, with an average length of 10 to 12 inches. They hold color till nearly ripe when they turn white without a yellow streak on them. Very tender, brittle, and of exceptional flavor. Pkt., 10c; oz., 15c; 1/4 lb., 50c; lb., \$1.25, postpaid.

IMPROVED EARLY WHITE SPINE—The vines are very vigorous and productive; the fruit is of an attractive, deep glossy green color, with light spines running from blossom end. Pkt., 10c; oz., 15c; 1/4 lb., 40c; lb., \$1.25, postpaid,

EVERBEARING—An early and prolific variety for small pickles, bearing throughout the season. The cucumbers are dark green, from 4 to 5 inches in length by 1 1/2 inches in diameter. They are meaty and crisp. Pkt., 10c; oz., 15c; 1/4 lb., 40c; lb., \$1.25, postpaid.

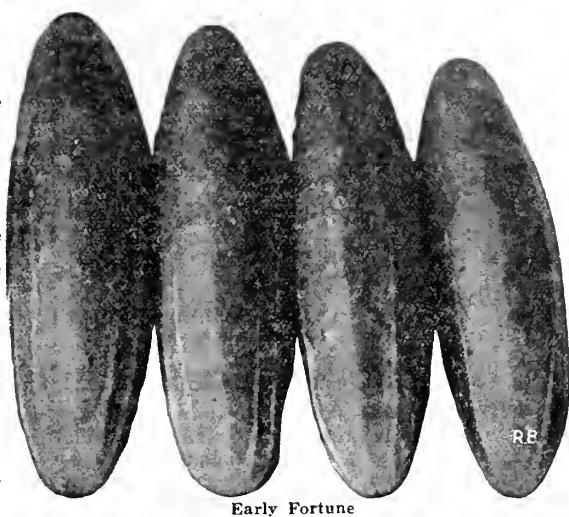
WEST INDIA GHERKIN—A very prolific, small-fruited variety, used exclusively for pickling. It is not properly a cucumber, and is of no value for slicing. The fruits are 2 to 3 inches in length, thick and rounded, closely covered with spines. Pkt., 10c; oz., 20c; 1/4 lb., 50c; lb., \$1.50, postpaid.

Kohl-Rabi

CULTURE. Sow the seed in the spring in drills three-fourths of an inch deep and two feet apart and when the plants are a few inches high thin to 15 inches. Cultivate same as for beets.

EARLY WHITE VIENNA—For forcing. Very early, small, handsome, white bulb. Pkt., 10c; oz., 20c; 1/4 lb., 50c; postpaid.

PURPLE VIENNA—A little later than the white, color: bluish purple. Pkt., 10c; oz., 20c; 1/4 lb., 50c; postpaid.



Early Fortune

Endive

Cultivation same as for lettuce. The blanching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use. One ounce of seed required for 100 feet of row.

BROAD LEAVED BATAVIAN—Leaves are broad thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which, when blanched, form one of the best winter salads. Crisp, tender and fine flavor. Pkt., 10c; oz., 15c; 1/4 lb., 40c, postpaid.

GREEN CURLED—Leaves finely cut. Pkt., 5c; oz., 15c; 1/4 lb., 40c, postpaid.

WHITE CURLED—Very beautiful. Leaves need no blanching. Pkt. 10c; oz., 15c; 1/4 lb., 40c, postpaid.

Kale or Borecole

CULTURE. More hardy than cabbage and makes excellent greens. Improved by a touch of frost. Sow in May and June; cultivate same as cabbage.

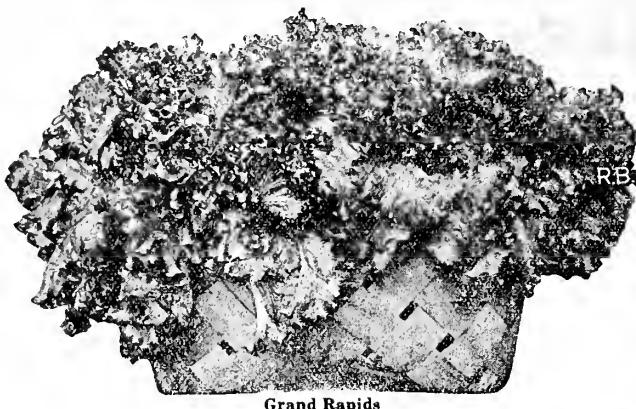
DWARF CURLED—Makes excellent greens for winter and spring use. The leaves are curly, bright green, very tender and delicate in flavor. Sow seeds in May or June, transplant in July and cultivate same as cabbage. For early spring use sow in September; protect over winter with a covering of straw or litter. Pkt., 10c; oz., 15c; 1/4 lb., 35c, postpaid.

TALL GREEN CURLED—Grows up to three feet high, bearing long, light green leaves, finely curled at the edges. Extremely hardy, being improved rather than injured by a moderate heavy frost. Pkt., 10c; oz., 15c; 1/4 lb., 35c, postpaid.

Herbs

A few Pot Herbs and Sweet Herbs should have a place in every vegetable garden. A very small space will give all the herbs needed by a family. Culture is very simple; the best way is to make seedbed in the early spring and set the plants out in beds.

	Pkt.	Oz.
ANISE. Used for flavoring	.10	.35
CARAWAY. Seed used for seasoning	.10	.20
CATNIP. Leaves used for tea	.10	.75
CHERVIL. Leaves aromatic, for seasoning	.10	.20
CORIANDER. Seeds used for seasoning	.10	.20
DILL. Used for seasoning pickles	.10	.20
HOREHOUND. Very useful for curing coughs	.10	.40
LAVENDER. Leaves very fragrant	.10	.60
MARJORAM, SWEET	.10	.25
ROSEMARY. Leaves very fragrant	.10	.40
RUE. A medicinal plant	.10	.60
SAFFRON. Used for flavoring	.10	.40
SAGE. A highly aromatic herb	.10	.50
SAVORY. SUMMER. Leaves and shoots used for seasoning	.10	.80
SWEET BASIL. Leaves used for flavoring	.10	.30
SWEET FENNEL. Seeds aromatic	.10	.25
THYME	.10	.50
WORMWOOD. Has medicinal qualities. A splendid plant for poultry	.10	.40



Grand Rapids

LETTUCE

CULTURE. For early spring plants sow the seed not over a quarter of an inch deep in hot beds or flats during February or early March. In the absence of any frames keep the flat on a sunny window-sill, being careful that it does not dry out. When the seedlings are about an inch tall, prick out carefully and transplant two and one-half inches apart each way. The plants should be set out in the garden as soon as the ground is warm and well prepared. Set out in rows 15 inches apart and the plants a foot apart in the row. For succession plants sow seed in the open ground and set the seedlings out as soon as they begin to crowd. Sowing should be made every two weeks from early spring until fall. One ounce of seed produces about 2,000 plants. The plants are ready for eating in thirty to seventy days from sowing, depending on the variety.

Loose Leaf Varieties

GRAND RAPIDS—The well-known forcing variety for the Middle West, where the butter-heads or cabbage varieties do not grow very well under glass. It is a loose-branching variety, forming no definite head; is extremely curly, and its light green color is very attractive. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

BLACK SEEDED SIMPSON—Makes large bunches of curly, crisp leaves. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

EARLY CURLLED SIMPSON—A crisp, sweet tender variety of the loose leaf type. The leaves are light green and very curled and crinkled. For early sowing in cold wet seasons this has no superior. It gives great satisfaction also when sown thickly and pulled while still young, for very early salads. For forcing it is proving a close rival to Grand Rapids. The plant is dwarf and compact and of rapid growth. Market gardeners or home planters can make no mistake by using this variety extensively. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

DENVER MARKET—This is a fine, crisp, crimp-head variety. Pkt. 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.75, postpaid.

EARLY CURLLED SILESIA—A dwarf of compact form and thick growth. Crisp, golden-green leaves, finely curled edges, an old favorite. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

Heading Varieties

BIG BOSTON—A large tight header, used extensively for forcing and for outdoor planting early and late in the season. It thrives much better on cooler temperatures than most other sorts, but will not stand the heat of mid-summer. The leaves are broad, smooth and a light dull green except for a narrow border of light brown. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75, postpaid.

EARLY PRIZE HEAD—The outer leaves are bright and green, shaded with brownish red. They are large and thin, attractively curled, and very tender. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

IMPROVED HANSON—One of the best for growing during the hot summer months, as it will stand heat and dry weather to perfection. Light green color outside and white within—tender, crisp. Pkt. 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

NEW YORK or LOS ANGELES MARKET, or WONDERFUL—A favorite variety. Heads very large, heavy and compact. Has a vigorous root system, which enables it to stand hot weather better than other varieties. The interior is beautifully blanched, creamy white, crisp and tender, and free from any bitterness. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50, postpaid.

COS LETTUCE—Of delightful, fresh crispness and mild flavor. A distinctly upright growth. The heads when well developed should be loosely tied with light string, or preferably old strips of rags. The inner leaves in this way are delicately blanched, very crisp and sweet.

PARIS WHITE COS—A variety that is of large size and splendid flavor and which has been found the most satisfactory in the middle west. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75, postpaid.



Denver Market



New York

DUBAY SEMESAN applied to vegetable seeds controls fungus. See page 62.

BLACK LEAF 40—Controls Aphid—See page 60.

See page 20 of this book for Farm Garden Plan. This plan can be modified to meet back-yard garden needs.

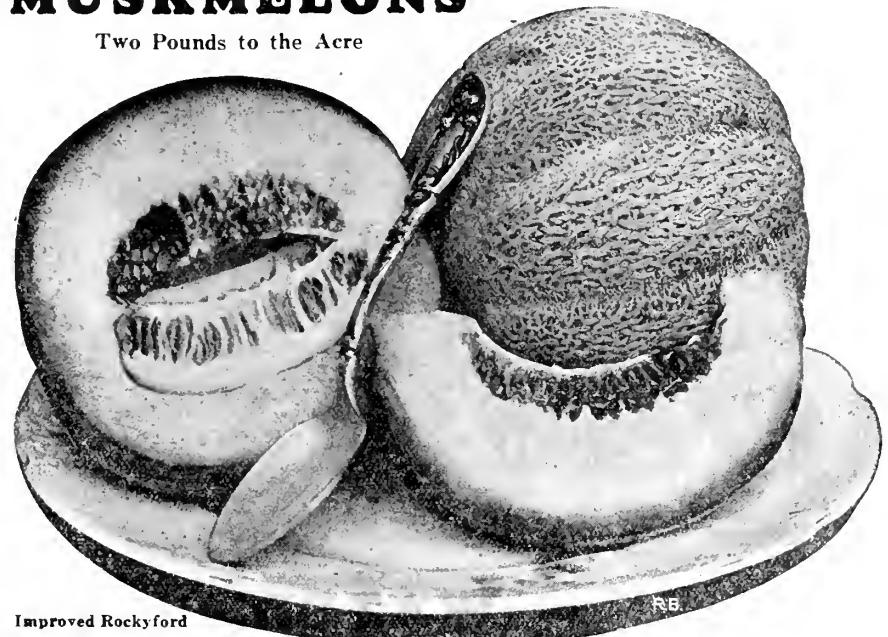
MUSKMELONS

Two Pounds to the Acre

CULTURE. Select a light, rich soil and after danger of frost is over and the ground has become dry and warm, plant in hills four to six feet each way and eight or 10 seeds to a hill. When well started and all danger of insects is past, pull out all but three plants. Cultivate until the vines cover the ground and pinch off the ends of the shoots to induce early fruiting. A few hills for early use may be had by sowing seed in the hotbed on pieces of sod or in pots and then transplant as soon as the weather is favorable. Earlier planting can be made by the use of Hotkaps. See page 59.

EDWARDS PERFECTO—We consider its table quality equal to any cantaloupe on the market and superior to 97 per cent of all melons offered. Edwards Perfecto is pink-meated, deliciously sweet, deep fleshed with very small seed cavity, the melon almost round, is covered with deep silvery netting, shallow ribbed. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

Improved Rockyford



ORANGE FLESH—Runs largely to Jumbo and Standard size. Undoubtedly the "last word" in the Rocky Ford type of shipping melons and has brought the highest price in every market shipped to. Its appealing deep orange flesh is its distinctive characteristic. It is the most solid, with the smallest seed cell of any type, and will weigh more to the crate. Fruit very uniform in size, nearly round and densely covered with a hard gray netting. We recommend it for its hardness, prolificness, deep flesh and excellent eating and shipping qualities. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75; 5 lbs., \$7.50, postpaid.

HALE'S BEST—A very early melon of fine flavor. Fruit is oval but somewhat irregular in size and shape. Flesh is salmon color; skin is very heavily netted. Very popular with gardeners on account of extremely heavy yield. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.25, postpaid.

POLLOCK'S SALMON TINT NO. 10-25—The melons run very uniform in size and the exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity, which is unusually small. The meat is solid and fine grained, flavor, unexcelled. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

BENDER'S SURPRISE—This is a large thick fleshed, heavily netted melon. Its flavor is wonderfully sweet. Well netted, almost round. It matures early and is an excellent home garden variety. Pkt. 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75, postpaid.

OSAGE OR MILLER'S CREAM—One of the finest and most popular salmon-fleshed muskmelons. The fruits are large, usually nearly three times the size of the Rockyford, with skin moderately netted and of oblong shape. Pkt., 10c oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

ROCKYFORD (Netted Gem)—The melons are slightly oval in shape, regular in size, with a fair amount of light grey netting. The melons are slightly ribbed. The green

flesh is fine grained and sweet almost to the rind. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

MONTREAL MARKET—A very large, late and fine flavored sort. The fruits mature in about 80 days, and as the vines are very prolific, an enormous crop can be harvested from an acre. The melons are good shippers. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

EXTRA EARLY HACKENSACK—An extra large, heavily ribbed sort. One of the best for home use and nearby markets, but the fruit will not stand shipping. A great improvement on the old Hackensack type. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

HONEY DEW—The average size of the melon is eight to 10 inches in diameter and eight to 12 inches in length, weight nine to 12 pounds. The creamy, white skin is very smooth with an occasional net. The flesh is an emerald green, very thick, with fine grain. Can be eaten to the extreme rind. The melon is not very easily bruised and is a splendid shipper. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

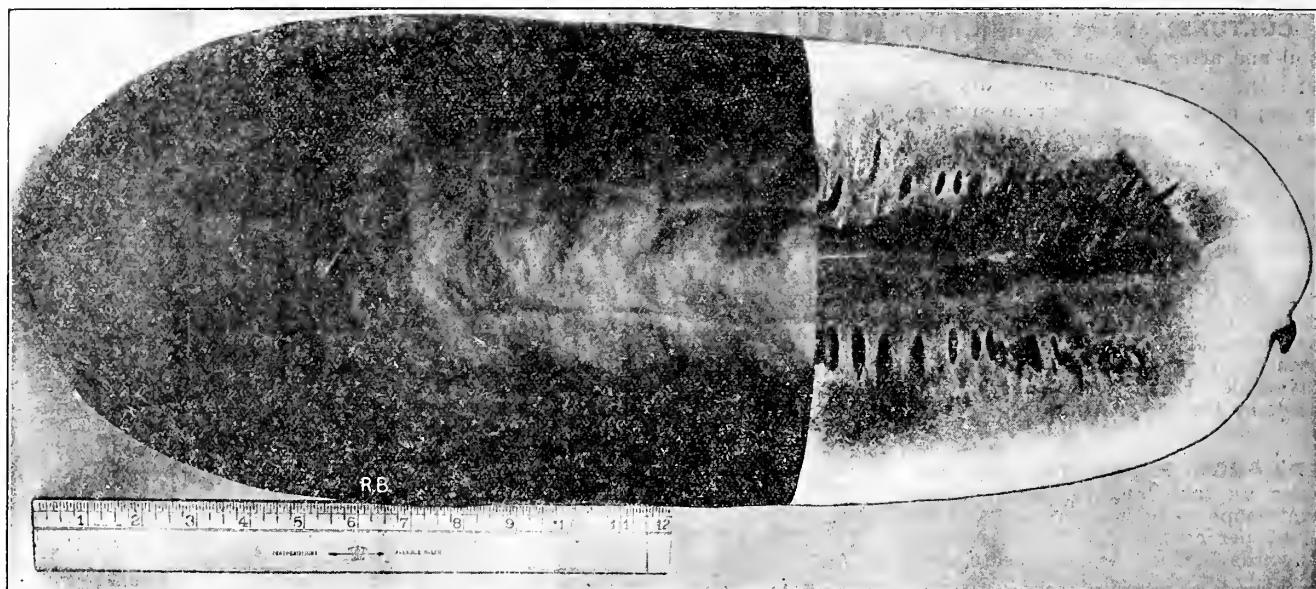
HEARTS OF GOLD—This melon runs very uniform in size and is a splendid shipping variety. The melons are oval to oblong in shape and are a little larger than the Rockyford. While it is a ribbed melon the ribs are not prominent and the melons are very heavily netted. The flesh is rich orange color, fine grain and of excellent flavor. Seed cavity is small. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50, postpaid.

IMPROVED BANANA—Produces fruit of the finest quality, 1 $\frac{1}{2}$ to 2 $\frac{1}{2}$ feet long; rind thin and comparatively tough; flesh of a beautiful reddish salmon color, of excellent flavor; withstands the heat to perfection; fine for family use. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50, postpaid.

MELON CULTIVATION—It is just as essential in raising good melons that the ground be thoroughly and carefully prepared as that good seed be used. Good melons are dependant on rapid and continuous growth, and if the plant roots are not able to grow rapidly and obtain food, the plant is going to be checked, and the chances for a real first-class melon crop are gone.

Keep lice under control by frequent applications of Black Leaf 40, Evergreen or Sheps Spray. The first spray should be made as soon as the third leaf appears, and as often as the lice reappear.

Keep the plant growing constantly. To do this surely, apply SACCO around the plant as first leaves appear at rate of one tablespoonful to each plant. When vines begin to run, double the application and when melons set, apply again. See Page 65 for full description of SACCO.



WATERMELONS

CULTURE—Prepare hills 8 to 10 feet apart each way, by thoroughly working into the soil an abundance of well rotted manure. When the ground is warm, plant 6 to 8 seeds to the hill, covering one inch. When plants form the first pair of leaves, thin to 3 plants to the hill. One ounce will plant about 40 hills, 3 to 4 lbs. to the acre. Earlier plantings can be made by protecting with Hotkaps—See page 59.

Use SACCO to supply plant food to growing vines. Spray with Black Leaf 40, Evergreen or Sheps Spray to control lice.

NEW WONDER—It is all its name implies. Is well adapted to southern conditions and for a shipping melon it can't be beat. The rind is tough and will withstand rough handling in transit, besides being a heavy cropper. It is a large, long dark green melon faint stripes making it a quick seller on the market. Flesh red, very crisp, solid and early. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50; 10 lbs., \$12.50, postpaid.

KLECKLEY'S SWEET—Select stock. It is an ideal melon for home use and local market, but the rind is so thin and crisp that it will not stand shipping. The melons grow very uniformly, about 20 inches long, with dark green skin, extremely thin rind, bright scarlet meat and solid heart. The flesh is crisp, sugary, and melting to the highest degree, and entirely free from stringiness. For the home garden we cannot recommend it too highly. Pkt. 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.50, postpaid.

HALBERT HONEY—An early melon, and can be successfully raised in the Northern States. The melons are quite long with blunt ends. The color is deep green. The rind is very thin, the rich, deep red, sugary flesh extending to within an inch of the outside shell. The rind is too thin for a good shipping melon, but for home use or nearby market this is a superb variety. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

IRISH GREY—The sparkling red flesh is very sweet and entirely free from hard center or stringiness, yet the flesh is very firm and compact and will not break when sliced. The size is uniformly large. Color of rind, yellowish grey, and almost as tough as that of the citron, ripens earlier than Tom Watson, and will keep in good condition for a long time after picking and stand long-distance shipping better than any other melon. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 85c; 10 lbs., \$7.50, postpaid.

STONE MOUNTAIN—This melon is becoming more popular. It grows very large and is almost round or blocky. It is a rich dark green in color, has a medium rind, and the flesh is an attractive deep red, sweet, with few seeds. Good, rich melon soil will produce crops averaging 40 to 80 pounds to the melon. It should be planted for nearby markets, until shipping ability has been tested. Stone Mountain is very prolific, a splendid drouth resister, and will produce a good profitable crop of late melons. Seed supply limited. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

ALABAMA SWEETS—Color is dark green with darker irregular markings. The rind is thin but very tough. The flesh is bright red, fine grained and sweet. The fruits are of good size and the seeds nearly white. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

FLORIDA FAVORITE—Medium size, striped alternately, light and dark green with deep red flesh. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

EXCEL—The touch rind makes it a good shipping melon, grows bigger than Watson. Flesh, red and crisp. Pkt. 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00; 10 lbs., \$8.00, postpaid.

TOM WATSON—An excellent variety for shipping. Melons long in shape, 18 to 24 inches, diameter about 10 inches. The dark green rind is tough and fairly thin. The flesh is rich and sweet. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 85c; 10 lbs., \$7.00, postpaid.

GEORGIA RATTLESNAKE—Medium sized fruits, mottled and striped. The flesh is dark red and of fine flavor. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

PHINNEY'S EARLY—A fine early melon for the home garden. Fruits medium sized oblong. Flesh bright red and sweet. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.50, postpaid.

SWEETHEART—Large oval fruits of light green color, well adapted for shipping. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 85c; 10 lbs., \$7.50, postpaid.

GOLDEN HONEY—Of medium size, oblong, the rind hard and of dark green color. The meat is of a rich, golden-yellow color, crisp and of fine flavor. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

CITRON—The fruits are uniform, round, medium size, used exclusively for pickles and preserves. Color, dark green, mottled and striped light green. Seeds red. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

One Ounce of Onion Seed for 100 Feet
of Drill; Five or Six Pounds for an
Acre.

CULTURE—It is not difficult to grow large onions from seed in one season if one has a rich piece of ground and is willing to do the necessary hand weeding and transplanting of the young onions. Onion seed should be sown quite early in the spring in rows 18 inches apart, and as soon as the seedlings are 3 to 4 inches tall they should be thinned out to stand 3 to 4 inches apart in the row. Several applications of a complete fertilizer scattered on both sides of the row and hoed into the soil will insure quick growth, larger size, and better onions. Pull when tops begin to die down, cure and sell, or store in cool, dry place. For growing onion sets, select a clean sandy soil of medium fertility, prepare it well in early spring, and at once sow seed in drills one foot apart, using 60 to 80 pounds of seed to an acre. Gather the sets when ripe, cure and store in a dry, airy place.

GIANT YELLOW PRIZETAKER—The American-grown Giant Yellow Prizetaker is far the handsomest, most productive, most popular, and best of the yellow-skin onions. The flesh is pure white, firm and fine-grained, and mild in flavor. It is of immense size, measuring from 12 to 18 inches in circumference. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 60c; lb., \$1.50, postpaid.

WHITE GLOBE—It is sometimes called Southport White Globe. The variety yields abundantly, produces medium to large, handsome, finely shaped, clear white bulbs. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 80c; lb., \$2.50, postpaid.

WHITE PORTUGAL OR SILVERSKIN—An early-ripening, good sized sort, of clear, silvery-white color, of very mild flavor, and extensively grown for pickling. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 80c; lb., \$2.50, postpaid.

RIVERSIDE SWEET SPANISH—There is a growing demand for the Spanish sweet onions, due to their large size, fine appearance, sparkling white flesh of delicate texture and tenderness, and extremely mild flavor. The mature bulbs will measure 4 to 6 inches in diameter and weigh up to 3 pounds. Its shipping and keeping quality make it a market favorite. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50, postpaid.

BERMUDA ONION PLANTS—See Page 19.

ONIONS SETS

To the market gardener working for an early market and the city or country farmer growing for his own table, our onion sets are just the thing. The sets eliminate a lot of hard work and weeding. They can be put out early, are hardy, staunch and fast growers and you can have green onions within a few weeks after your garden is workable in the spring, by using our sets. See Page 19.

GARLIC (Ajo, Sp.)—A hard onion-like plant, used extensively through the southwest for flavoring. It is particularly well known in "Chili" houses. Only a very little is needed, as it is much stronger than onions. Plant and care for the same as onions. Oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 75c. Garlic Bulbs—35c per pound.

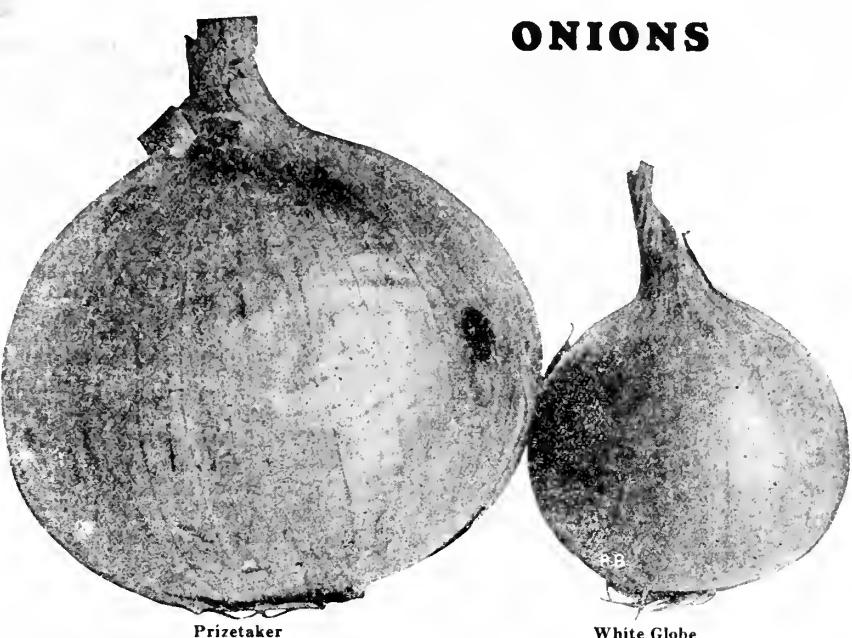
OKRA OR GUMBO

(Gombo, Sp.) Used for Thickening and Flavoring Soup)

WHITE VELVET—The pods are large, round and smooth, almost pure white, and of excellent quality. The plant grows 3 feet high. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 70c, postpaid.

PERKIN'S LONG POD—This variety is now used almost exclusively by the soup canners, as the pods are of deep green color and of fine quality, and the plant is very prolific. The pods are long, and somewhat ribbed or corrugated. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 70c, postpaid.

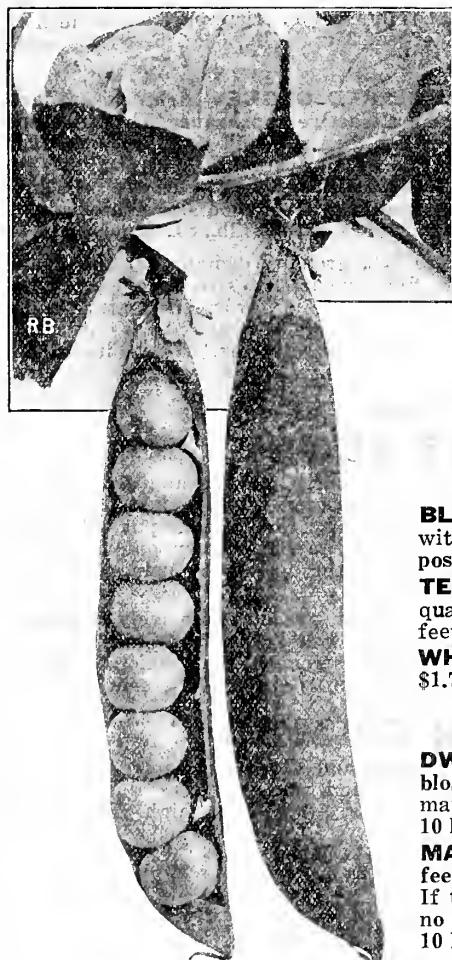
DWARF GREEN—Bears pods ready for use ten days to two weeks earlier than the tall sorts. The plants are of dwarf, stocky growth, and are very prolific. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 70c, postpaid.



ONIONS



Green Onions



PEAS

One Pound Will Plant 50 Feet of Drill

CULTURE. Peas of the extra early smooth class are the very first thing to be planted in the garden in spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall, late varieties need brush or other support. By selecting sorts that do not grow much over two feet high, the necessity of using brush may be avoided. Judicious selections of varieties and planting frequently for succession will give a full supply of the choicest green peas almost during the entire season, with the possible exception of the hottest part of the summer. The late tall sorts may be planted in double rows and brush stuck in between for support. All garden peas, however, require good, strong and fertile land. Very dwarf sorts of the American Wonder type will succeed only on the richest garden soil and may be planted in rows one foot apart. Peas should be inoculated with Nitragin.

Extra Early Varieties

ALASKA—An extra early round, dwarf pea. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

FIRST AND BEST—A prolific early type. Round seeded. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

GRADUS—The earliest of the wrinkled seeded sorts, maturing only a few days after the extra early type and much sweeter. The vines are heavy and bear well filled pods in large numbers. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

Second Early and Main Crop

AMERICAN WONDER—The plants grow only 10 inches high and produce an abundance of medium-size pods, which are filled with large, sweet peas of luscious quality. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

LAXTONIAN—A dwarf pea with large handsome pods, very similar to the Gradus, which variety it excels in yield and earliness. Vines average 15 inches in length, and the pods 3½ inches. One of the best peas for private or commercial growing. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

LITTLE MARVEL—The most satisfactory pea for the home garden. The big point in its favor is that it remains in prime picking condition a week longer than the old sorts, which last only a few days. Productive, hardy, luscious and sugary. Vines 19 inches, pod 3½ inches, dark green and well filled. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

EARLY PREMIUM GEM—Vines 12 to 15 inches tall. Early and productive. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

NOTT'S EXCELSIOR—Just a little later than American Wonder, and considerably larger. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

THOS. LAXTON—This is a selection of Gradus. Vines grow 3 to 3½ feet. Few days later than Gradus, better yielder. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

DWARF TELEPHONE—About 18 inches tall. The pods are five inches long, maturing rather late in the season. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

BLISS EVERBEARING—A fine medium early. Vines 2½ to three feet tall, with an abundance of well filled pods. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

TELEPHONE (Tall)—Peas are very large, of dark green color. Excellent quality, pods exceedingly large and always well filled. Vines are tall, about 4½ feet. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

WHITE MARROWFAT—A tall late sort. Pkt., 10c; lb., 25c; 2 lbs., 45c; 10 lbs., \$1.75, postpaid.

Edible Podded Varieties

DWARF GREY SUGAR—Vines grow only 15 to 18 inches in height with purplish blossoms. Sugar peas are not shelled before cooking, but are prepared in the same manner as green beans and are certainly delicious. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

MAMMOTH MELTING SUGAR—This large late variety grows four or five feet high and bears large pods four or 4½ inches long, often curved and twisted. If the pods are picked when the peas are only half developed there is absolutely no stringiness, but are sweet, brittle and appetizing. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$2.00, postpaid.

MUSTARD

THE leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves. Sow the seed in drills early in the spring and at frequent intervals throughout the summer to secure a constant supply of fresh greens. Mustard is hardy and is easily grown. One ounce will sow 50 feet of row.

CHINESE — Desirable kind. Each plant produces extra-large leaves of good substance and of most appetizing pungency. It succeeds well also from spring sowings, but does not make so large a plant during the warm summer as it does in the cooler fall or winter months. When they are grown in rich soil, the leaves attain 16 to 20 inches in length; they are of light green color, with large white ribs or leaf stalks. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 60c, postpaid.

GIANT SOUTHERN CURLED — This is the standard variety. The leaves, which are beautifully curled, often measuring 14 inches, are ready for use about six weeks from sowing. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 60c, postpaid.

WHITE MUSTARD — Seed is light yellow. Used principally for seasoning and for grinding to make commercial mustard. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 60c, postpaid.

PARSLEY

One Ounce to 100 Feet of Drill
Seven Pounds to Acre

CULTURE. Soak seeds a few hours and sow early in spring and continue until early autumn. If for horse culture, the rows should be three feet apart; if for hand culture, 18 inches.

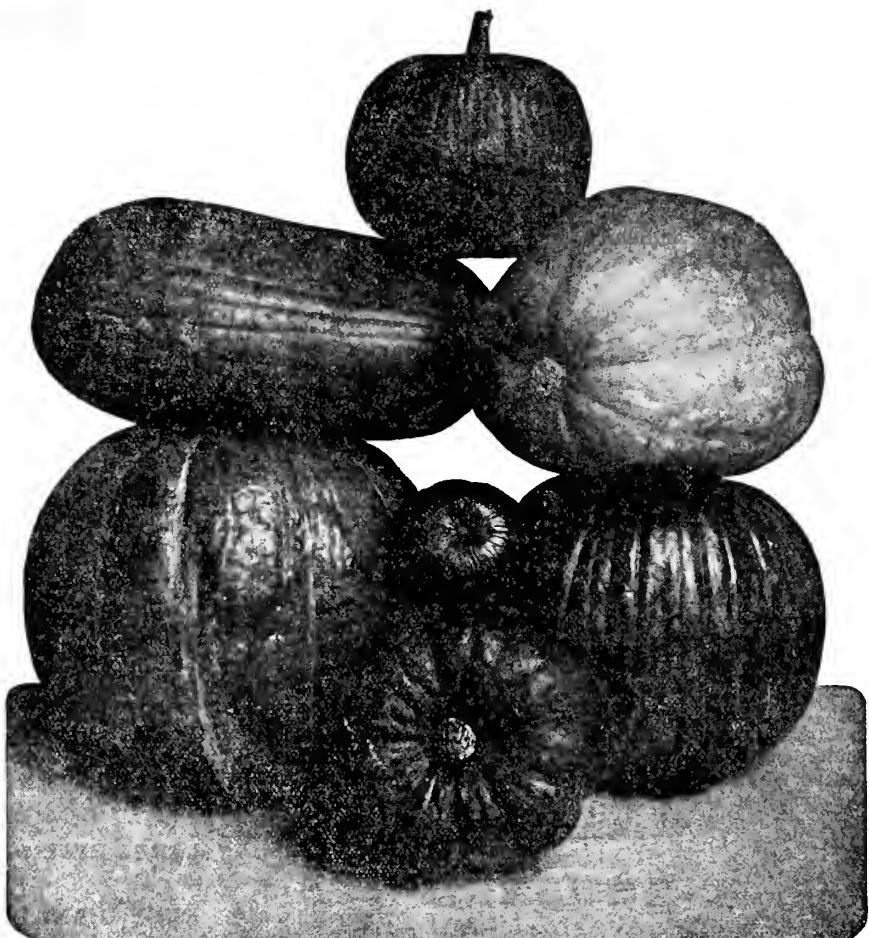
To preserve during winter, transplant to light cellar or cold frame.

CHAMPION MOSS CURLED — Extra dark. Leaves are crimped and curled, giving a most beautiful decorative appearance. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c, postpaid.

PARSNIPS

CULTURE. Sow the seed early in the spring before the ground becomes too thoroughly dry and warm. The seed is rather slow to germinate so that the gardener finds it a help to mark the row with a radish seed here and there as with carrots. The rows should be 12 or 18 inches apart, depending on the type of cultivation to be used. Thin out the plants to five or six inches apart.

HOLLOW CROWN — The most popular and best for all purposes. The skin is smooth and white and the flesh tender. The roots grow 18 to 20 inches long. Our selected strain of this is particularly smooth and fine grained. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.25, postpaid.



PUMPKINS

Two to Three Pounds per Acre

Avoid planting pumpkins in the garden, as they will mix with cucumbers, melons and other vines. Usually they are planted in the corn field, dropping three or four seeds every fourth hill, but they do better planted by themselves. Plant about eight or 10 feet apart each way. Put some well-rotted manure beneath each hill thoroughly mixing it with the soil.

SMALL SUGAR — Handsome and prolific, of small size, averaging about 10 inches in diameter; skin is a deep rich orange-yellow, fine-grained, sweet, dry and an excellent keeper; a nice table variety. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

IMPROVED GREEN-STRIPED CUSHAW — A crook-necked variety, with green and white striped skin. The flesh is of a rich yellow color, solid, fine-grained, very thick and sweet. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.25, postpaid.

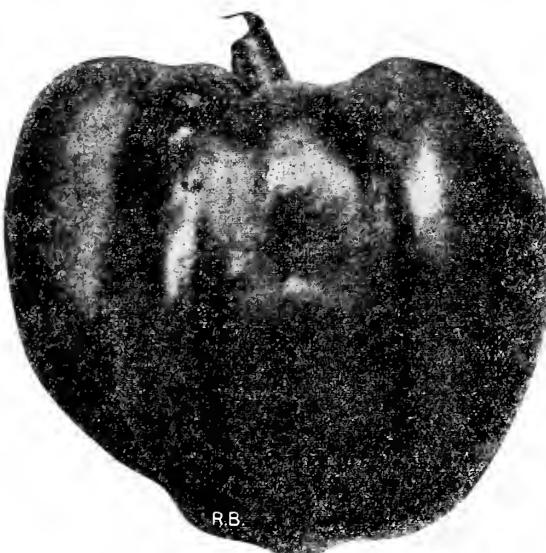
JAPANESE PIE — Very meaty and solid, and in general appearance resembles the Cushaw, but it is earlier and larger. Flesh very thick, rich

salmon color, fine grained, dry and sweet. Seed cavity small. Of medium size, early and a splendid keeper. Highly desirable as a pie or cooking pumpkin. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.35, postpaid.

KENTUCKY FIELD — A very large flat pumpkin averaging about two feet through. When ripened the skin is a rich cream color, flesh yellow, and of fine quality. It is grown more largely than any other kind, because of its keeping qualities and it is also popular for canning. It is probably less susceptible to attacks by the squash bugs than any other sort. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 60c, postpaid.

TENNESSEE SWEET POTATO — This delicious, long-keeping pumpkin is pear shaped, medium sized and slightly ribbed. Color creamy-white, sometimes slightly striped with green. Flesh light colored, fine grained, dry and of superior quality. When cooked resembles the Sweet Potato in flavor. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c, postpaid.

KING OF THE MAMMOTHS — This variety is largely grown for Fairs and Exhibitions. Grows to large size, sometimes exceeding 100 pounds in weight. The skin is reddish-yellow, flesh a rich-orange color. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.40, postpaid.



Chinese Giant Pepper

CHINESE GIANT—An enormous variety, double the size of Ruby King, averaging 12 to 15 inches circumference. Notwithstanding its large size, it is early and very prolific. Plants are healthy, well branched, about two feet high and carry an enormous load of fruit, often having the appearance of being bunched together. Flesh is thick, tender, mild and sweet, and is unexcelled for salad or stuffed mangoes. They can be sliced and eaten like tomatoes. When ripe the peppers are a rich glossy scarlet, making them of unusually fine appearance. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.40, postpaid.

RHUBARB

One ounce of seed to 125 feet of drill.

CULTURE—Sow seed in cold frame, in a fine rich sandy loam, about the first of March, in drills four inches apart. Keep the frames covered at night and cold days so that the soil will not freeze. Use the sprinkler daily, being careful not to apply an excess of water at any time, and in six to eight weeks the plants will be large enough to set in the open ground. Transplant to a rich soil and set in rows 12 inches apart each way. Transplant again early the next spring to permanent location, setting roots four to five feet apart each way in rich soil. Rhubarb is ready to use the second year from seed. Rhubarb is a gross feeder and will make good use of strong manure, either fresh or well-rotted. Top-dress liberally in the fall and spade the manure into the ground in the spring. Pull the stalks as long as demand continues.

VICTORIA—A very large, thick red-stalked, late variety of fine quality. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.35, postpaid.

Rhubarb Roots

The city farmer who desires to raise Rhubarb and finds he cannot get a start easily from the Rhubarb Seed should plant the roots and grow from them.

LINNAEUS AND VICTORIA PLANTS—2 for 25c; 5 for 60c; 12 for \$1.25, postpaid. \$5.00 per 100 at purchaser's expense. See page 19 for parcel post prices.

PEPPERS

One Ounce of Seed will produce about 1,000 plants.

CULTURE—The pepper plant is tender and should be started under glass. Warm, moist soil is best, with plenty of well-rotted manure plowed under. The plants should be set one and one-half feet apart in rows two and one-half to three feet apart. Sow seed in hotbeds in March. The plants may be transplanted into small pots and then when the ground is warm the peppers will make rapid growth as soon as set out. The city gardener needing only a few plants in his garden will probably do well to buy well grown plants rather than attempting to raise his own from seed. We are glad to offer our excellent stock of these plants for this purpose. See Page 19. Earlier plantings can be made by using Hotkaps.

HARRIS EARLY GIANT—This is the heavy yielder among the large Peppers. It is also earlier than other large kinds. The plants are vigorous, 18 inches to two feet tall; and the fruits $3\frac{1}{2}$ by 5 inches. Color deep green turning to red, flesh thick and very sweet. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; $\frac{1}{4}$ lb., \$1.85, postpaid.

RUBY KING—One of the most popular varieties. The fruits are large, $4\frac{1}{2}$ to 6 inches long, $3\frac{1}{2}$ to 4 inches diameter, and of a deep green color, turning to bright ruby red when ripe. The flesh is thick and mild flavored. The plants are about $2\frac{1}{2}$ feet high, vigorous, compact and productive. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.35,

LONG RED CAYENNE—A well known medium early variety having a slender twisted and pointed pod about four inches long. Color deep green when fruit is young, bright red when ripe. Extremely strong and pungent flesh. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.40, postpaid.

OTHER GOOD PEPPERS

TABASCO—Used in the famous Tabasco Sauce. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c, postpaid.

LARGE BELL OR BULL NOSE—One of the hardest and earliest.

RUBY GIANT—A popular, prolific, large fruited pepper.

PIMENTO—Delicious for many table uses.

RED CHILI—Small, very hot and pungent.

Prices of any of the above except where otherwise noted: Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.25, postpaid.

Salsify or Vegetable Oyster

One ounce for 50 feet of drill.

CULTURE—Sow as early as the ground can be worked in the spring, in drills 12 inches apart, and one inch deep. After plants are up three inches high, thin to six inches apart in the row. Cultivate about the same as for carrots, being certain to keep the weeds down. The roots may be used from the rows as wanted and will carry through the winter if left standing in the row.

MAMMOTH SANDWICH ISLAND—The largest and most profitable Salsify now in cultivation. Roots heavy, of agreeable flavor, white color, and a satisfactory sort in every way. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, postpaid.

ORDER EARLY

Early Orders insure a complete stock and prompt shipment

Dubay Semesan applied to vegetable seeds controls fungus. See page 62. Black Leaf 40, page 60 controls aphid. All prices subject to change without notice.

RADISHES

One ounce of seed required for 100 feet of row, eight to 10 pounds of seed will plant one acre.

CULTURE—The secret of growing good Radishes consists chiefly in the observance, on the part of the grower, of three points. First, they should be grown on light, quick soil; second, they should be given plenty of water; and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly and if not supplied with sufficient moisture are likely to be pithy. Sow seed one-half inch deep in the early spring in rows one foot apart, and the more fertile the soil the faster they will grow. For a succession, sow every ten days throughout the season and stir the soil sufficiently to keep out weeds.

SPARKLER—This excellent variety produces uniform size round radishes. Sparkler is unique in that the upper half of radish is of bright scarlet color, while the bottom half is of pure white. Meat pure white and juicy with a most agreeable flavor. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

ICICLE—A very attractive pure white radish, the earliest of the long white summer sorts and of most excellent quality. The roots are about five inches long with a sloping top and point tips. The diameter is from one-half to five-eighths of an inch. It is one of the most desirable varieties for summer planting out of doors, both for the home garden and the market. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

EARLY SCARLET GLOBE—This is a splendid variety for hot-bed or greenhouse culture. We consider it the best of the round scarlet forcing sorts. The radishes mature quickly, producing small growth of tops, and are solid and crisp; very uniform in shape. The color is a handsome bright scarlet. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 85c, postpaid.

SAXA—The earliest known radish and an excellent variety for greenhouse forcing or the outdoor garden. Round as a ball, with a very small top and a distinctive bright scarlet color quite all its own. Pkt., 10c; oz., 15c; 1/4 lb., 40c; lb., \$1.00, postpaid.

CRIMSON GIANT—For forcing or outdoor planting. Although twice the size of other forcing sorts, this does not get pithy or hollow; the skin is crimson, flesh is white, tender, crisp and sweet flavored. Sow seed thinly to permit root growth. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c; postpaid.

SCARLET TURNIP WHITE TIP—A fine sort for very early plantings. The color is bright scarlet, except for the tip which is pure white. The white flesh has an agreeable biting tinge. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

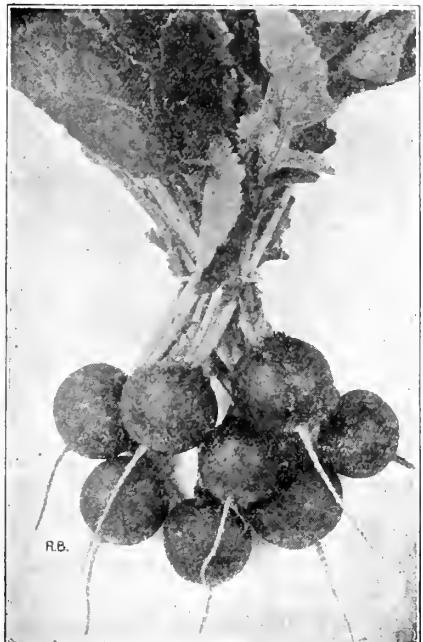
EARLY SCARLET TURNIP—A standard early, round, bright red radish, of very agreeable flavor, and crisp texture. These may be planted at any time during the season, save perhaps for a few weeks in mid-summer, and a delightful crop will result. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 75c, postpaid.

EARLY WHITE TURNIP OR WHITE BOX Good for forcing or open ground. Skin and flesh white, crisp, tender, tops are short and tap root thin. Pkt., 10c; oz., 15c; 1/4 lb., 30c; lb., 90c, postpaid.

LONG SCARLET SHORT TOP—Considered the best early long red radish for home garden. The carmine red roots grow to be six inches long, from a third to a half of which is above ground. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c; postpaid.

LONG WHITE VIENNA OR LADY FINGER—A fine early maturing clear white long summer radish, for the home garden, and to some extent for the trucker. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

WHITE STRASBURG—A good sized long tapering pure white summer radish of mild flavor. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.



Early Scarlet Globe

FRENCH BREAKFAST—The most beautiful and probably the most popular type of the olive shaped. The carmine, white-tipped roots must be used immediately after they have developed to enjoy their best flavor. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

Winter Varieties

The merits of Winter Radishes are little appreciated, probably because they are seldom grown and few people have knowledge of their worth. These grow to large size

and keep well for winter and spring use. Sow the seed from the middle of June until the middle of September. Include some of these with your order.

CALIFORNIA MAMMOTH WHITE—Pure white, about one foot long and two or three inches through. Tapering regularly to the tip. The flesh is tender and crisp and keeps well through the winter. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c, postpaid.

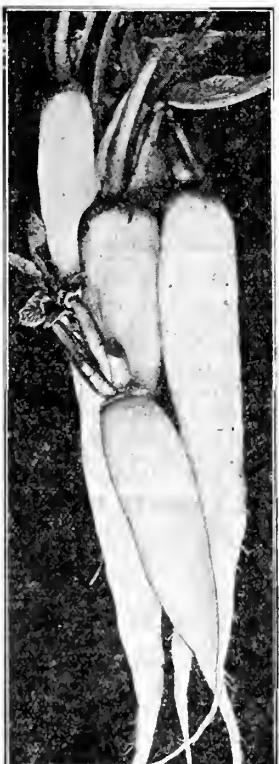
CHINA ROSE—A good sized root, four or five inches long, of a deep rose color, with pure white flesh with an agreeable pungent flavor. The flesh is firm and is a good keeper. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c postpaid.

WHITE CHINESE OR NEW CELESTIAL

—One of the largest of the winter radishes, being 12 to 15 inches long and five inches in diameter when well grown. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c postpaid.

LONG BLACK SPANISH—A good sized root, perfectly cylindrical in shape, about eight inches long and three inches in diameter. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c, postpaid.

ROUND BLACK SPANISH—The black, white-fleshed roots are practically round, about three to four inches in diameter. This variety is exceptionally good for storing for use all winter long. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 90c postpaid.



White Icicle

SPINACH

Two ounces will sow 100 feet of drill; 20 pounds per acre.



Long Standing Spinach

SPINACH ranks with Lettuce and Chard as the tonics of the garden. You owe it to your health to have a row of Spinach. For early summer use, sow early in the spring in a good, well-fertilized soil, in drills one inch deep, and one and one-half to two feet between rows. For winter and spring use, sow in October. Requires but little cultivation. Best developed and most tender and succulent when grown in rich soil. Matures for table use in about 40 days. One of the most desirable winter and spring greens, and is better liked and usually sells at much higher prices than kale or turnip salad. Is largely grown

Bloomsdale Savoy-Leaved Spinach



LONG STANDING—This excellent variety comes quickly to maturity and remains in condition for use much longer than other sorts. The leaves are thick and very dark, rich green. In our estimation it is the best for the private garden, and it is one of the most popular and profitable with market gardeners. Pkt., 10c; oz., 15c; lb., 40c; 5 lbs., \$1.65, postpaid.

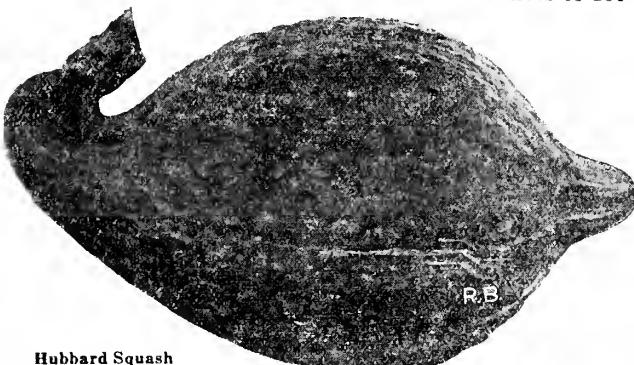
KING OF DENMARK—The best long season Spinach remaining two weeks longer than others before lofting to seed. Plant vigorous and spreading; leaves large, rounded, crumpled and blistered; deep green in color. Pkt., 10c; oz., 15c; lb., 40c; 5 lbs., \$1.65, postpaid.

BLOOMSDALE SAVOY LEAVED—A very early variety, particularly well adapted for fall planting for early spring use. It is also good for the home garden, but frequent succession plantings should be made, as it goes quickly to seed. The plant is good sized and hardy, the curly dark green leaves are tender and delicious. Pkt., 10c; oz., 15c; lb., 40c; 5 lbs., \$1.65, postpaid.

NEW ZEALAND—This is entirely different from any other variety, as it is available during the hottest months of the year sending out fresh growth after being cut continuously up until frost. Stems and leaves are thick, fleshy, tender and succulent. Very productive. Should be in every garden. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 75c, postpaid.

SQUASH

Four ounces to 100 hills; 3 pounds per acre.



Hubbard Squash

SUMMER varieties come into use early in the summer, but as they are tender the seed must not be sown until after danger of frost is past. The seed should be planted in hills four feet apart. The winter varieties should not be planted until the early part of June. The fruit will not mature until late in the fall, and, having a very firm, hard shell, keeps well, and with a little care squashes can be had all winter and until late in the spring. Plant in hills from 6 to 8 feet apart, using two or three seeds to the hill. Moderately rich soil will grow good squashes.

EARLY WHITE BUSH OR PATTY PAN—Matures early and will bear throughout the season, if the fruits are kept gathered. The skin is clear white, the flesh thick and of delightful flavor. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

EARLY YELLOW BUSH—Like the White Bush, has yellow flesh. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00, postpaid.

YELLOW SUMMER CROOKNECK—Our strain of this produces far superior squash to the common Summer Crookneck. A delicious dish cooked in any of several ways. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.15, postpaid.

YELLOW SUMMER STRAIGHTNECK—A desirable summer squash, it will pack easier, will produce as heavily,

is of same appearance as Crookneck Yellow, but has a heavier neck and gives more edible squash. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

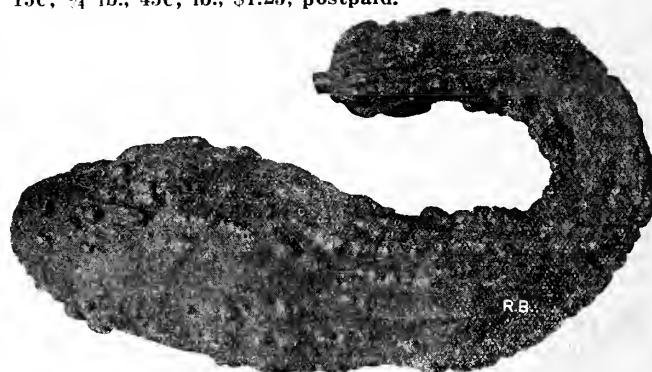
HUBBARD—The vines are vigorous and very productive. The fruits are large, heavy and moderately warty, with a very hard shell. The skin is uniformly dark green. The flesh is bright orange yellow, fine grained, dry and richly flavored. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

GOLDEN HUBBARD—Like the Chicago Warted Hubbard except for the color. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

MAMMOTH CHILI—Often weighs from 75 to 150 pounds. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50, postpaid.

BOSTON MARROW—A good medium sized sort, of oval shape, with a thin orange skin. The flesh is very tender and fine grained. Is highly prized for pies and canning. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.25, postpaid.

BANANA—One of the finest winter squash, of a sweet potato quality, free from stringiness, 12 inches long, 6 inches in diameter, tapering at either end. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.25, postpaid.

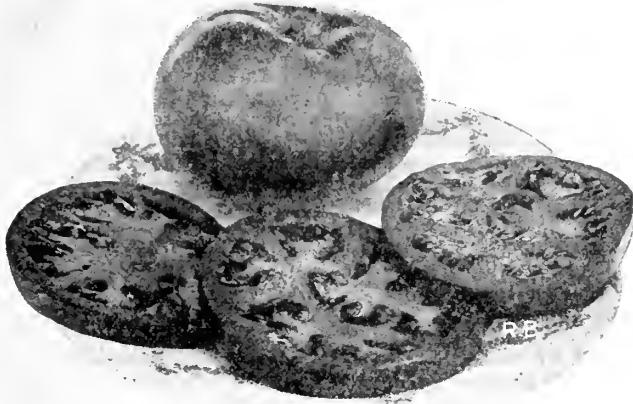


Yellow Summer Crookneck Squash

ROSS SEED CO. SELECTED TOMATO SEED

CULTURE—Sow seed in a box or hotbed early, and transplant at least once to get good strong root growth. When danger of frost is over, set in the open ground 3 to 5 feet apart each way and cultivate thoroughly. Fruits may be had several days earlier by transplanting into small pots and then setting out the entire contents when

the ground is dry and warm. It greatly increases the quality and earliness of the fruit if the vines are tied to a trellis or stakes to keep the fruit off the ground. If this is not convenient, it will help considerably, particularly on heavy soils, to throw a little straw or litter under each vine.



Chalk's Early Jewel

CHALK'S EARLY JEWEL—The largest, smoothest, finest flavored, extra early, bright red tomato. The plant is of strong robust growth with dense foliage, which is quite free from blight. Fruits are bright scarlet, smooth, with a decidedly solid flesh and of remarkably sweet flavor. Pkt., 10c; ½ oz., 20c; oz., 30c; ¼ lb., 80c, postpaid.

BONNY BEST—Early, medium sized, bright scarlet. Fine for home use. Pkt., 10c; ½ oz., 20c; oz., 30c; ¼ lb., 80c, postpaid.

JUNE PINK—This is the earliest of the Pink varieties, prolific. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50, postpaid.

EARLIANA—Popular, extra early, red tomato. Prolific, has sturdy vine, sparse foliage, producing fruit in compact masses. Pkt., 10c; ½ oz., 15c; oz., 25c; ¼ lb., 75c, postpaid.

DWARF CHAMPION—A dwarf variety sometimes called the "Tree Tomato" on account of its upright growth and its ability to stand upright it can be planted nearer together than any of the vining sorts. Very early, the fruit is medium size, smooth and uniform, of a purplish-pink color. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.40, postpaid.

KANSAS STANDARD—Tree type, a true tomato of the potato leaved class. It is of rapid, vigorous growth, with strong, heavy stalks which stand up well. The fruit is bright, glossy red, produced in clusters of 4 to 5 tomatoes, uniform in size, smooth, to the stem, has very few seeds. Pkt., 10c; ½ oz., 30c; oz., 50c; ¼ lb., \$1.75, postpaid.

DWARF STONE—This is the largest Dwarf Tomato, resembles Dwarf Champion. In shape and size the fruit resembles "New Stone," bright red, often weighing ¾ pounds, smooth, free from cracks and of fine flavor. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.40, postpaid.

JOHN BAER—An extra early scarlet fruited variety of superior merit. The large fruits are nearly round, smooth, firm, of attractive color, and of excellent quality. Vines do not grow very large, but are productive. Pkt., 10c; ½ oz., 35c; oz., 60c; ¼ lb., \$1.75, postpaid.

NEW STONE—One of the largest and most solid, late or main crop, bright red varieties. It is unsurpassed for preserving or canning. The vines are large, vigorous and very productive. The fruits are bright, deep scarlet, oval and very deep, exceptionally smooth and uniform in size. Pkt., 10c; oz., 20c; ¼ lb., 50c, postpaid.

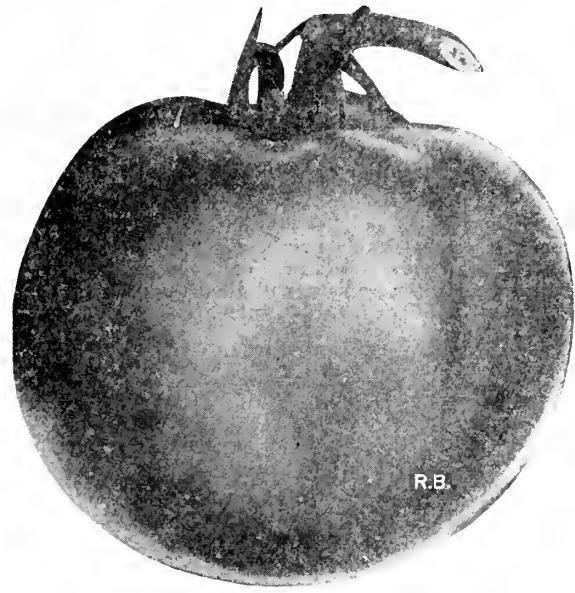
MARGLOBE—A remarkably pure scarlet globe shaped tomato of extra size. Matures early, is a special strain of the Globe. Attractive, solid and tasty. Resistant to rust and wilt. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25, postpaid.

PONDEROSA (The Giant Tomato) Tomatoes grow in beautiful clusters mostly oblong in shape, usually ribbed, color deep purple, has solid flesh of sweet flavor and small seed cells. Pkt., 10c; ½ oz., 30c; oz., 50c; ¼ lb., \$1.50, postpaid.

ACME—Early, purple fruit, free bearer. Pkt., 10c; ½ oz., 20c; oz., 30c; ¼ lb., \$1.25 postpaid.

BEAUTY—Vines large, vigorous, fruit large, uniform, smooth, purplish-pink skin. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.25, postpaid.

MATCHLESS—Large, bright red, long keeping fruit. Pkt., 10c; ½ oz., 20c; oz., 30c; ¼ lb., \$1.00, postpaid.



R.B.

BEEFSTEAK OR CRIMSON CUSHION—This giant, smooth-red tomato is an outstanding favorite with home gardeners. It is too large for shipping, but it is a leading variety for slicing. Clubs, tea-rooms, roadside inns and hotels prefer to serve it. Always red, always smooth, no waste in preparing for the table. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50, postpaid.

GOLDEN PONDEROSA—Sliced and served with the Purple Ponderosa it makes a highly decorative and appetizing salad. Pkt., 10c; ½ oz., 30c; oz., 50c; ¼ lb., \$1.75, postpaid.

GOLDEN QUEEN—A splendid large yellow tomato. Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.25, postpaid.

SMALL FRUITED TOMATOES

Very Desirable for Pickles, Salads and Preserves

Prices of the following: Pkt., 10c; ½ oz., 35c; oz., 60c, postpaid.

Red and Yellow Cherry—Small bright scarlet. Yellow.

Red and Yellow Plum—Fruit about 2 inches long, 1 inch through. One is plum-red, the other lemon-yellow.

Red and Yellow Pear—True pear-shaped, one carmine, the other deep yellow.

Ground Cherry, Husk, or Strawberry—The small yellow fruit is enclosed in a husk. It is very sweet.

Selected Seed Potatoes

CULTURE—To secure the best results in growing potatoes it is necessary to plant as early as the ground can be made ready. Use a rich soil and plant in rows three feet apart, the cuttings or sets a foot apart in the rows. Disease and failures in harvesting a profitable crop of potatoes are attributable chiefly to carelessness in planting unselected seed stock. The average grower usually pays less attention to the quality of his seed potatoes than to any other seed he plants. Ross Branded Seed Potatoes are grown in the Red River Valley of Minnesota and North Dakota and are strictly fancy stock, having been inspected under federal supervision. These should not be confused with ordinary stock.

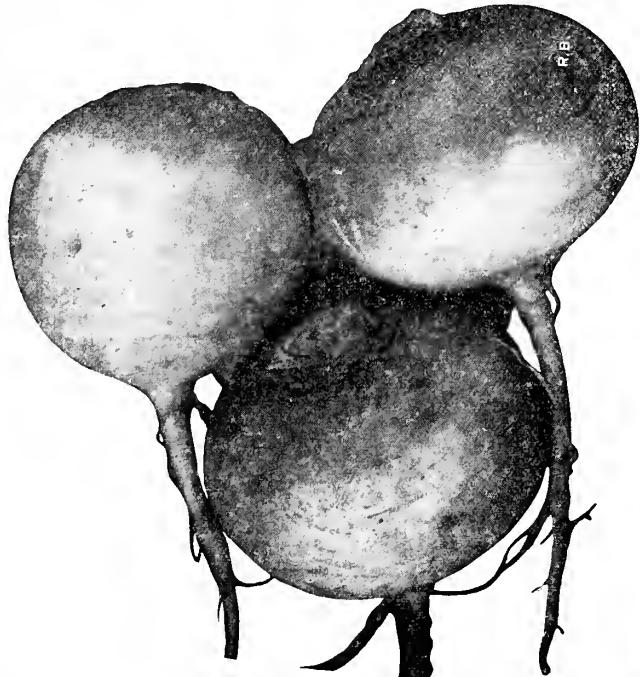
TRIUMPH—Very early. Tubers are of medium size, round and uniform in shape, with but few small ones, eyes slightly depressed, color a beautiful light red. It is one of the best extra early market potatoes, especially for the South.

EARLY OHIO—Probably the best for the Middle West States, and its superior, for general planting, has not been introduced to this date. Early Ohio is fit for table use before fully ripe, and can be shipped earlier than any other white potato.

IRISH COBBLER—Has shown a persistent increase in this section the past few years. In many soils it is as early, or within a few days as early, as Early Ohio and the yield has shown more bushels of marketable potatoes to the acre. The potato is chunky, white in color of both skin and meat, is of large medium size, making it the most attractive variety by far on the early market.

On account of the market fluctuations, we are unable to name exact prices. We will be pleased to have you write during the month of January or later and we will then quote prices for prompt or future shipments.

Please give quantity wanted when writing for prices.



Purple Top White Globe

TURNIPS

One ounce will sow 150 feet of drill, one to two pounds for an acre.

FOR summer use sow early in spring in light, rich or new soil, in drills one and one-half to two feet apart according to size of the variety and cover one-half inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds so that the young plants will not be checked in growth. Any overcrowding will result in rough and poorly flavored roots. It is important to get the spring and summer crop started very early so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and bitter.

In the middle and western states sow for fall and main crop from the middle of July to the first of September and in the manner given for spring sowing. In the fields, turnips are often sown broadcast, though in most cases better results are obtained by drill culture. Good results from broadcast sowing are often obtained on new and burned over land where the weeds are not likely to be troublesome.

EXTRA EARLY PURPLE TOP MILAN—A very early sort of fine flavor. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c, postpaid.

EXTRA EARLY WHITE MILAN—The earliest turnip. Tops very small, distinctly strap-leaved, and growing very erect and compact. Bulbs form earliest of any sort. The clean, white roots are smooth, flat, symmetrical and handsome in appearance. The flesh is white, tender and sweet. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 85c; 5 lbs., \$3.75, postpaid.

EARLY WHITE FLAT DUTCH—A quick growing, medium sized root for early spring or fall planting. The skin and flesh are both pure white, the latter being quite tender and sweet. The turnip is flat, with a fine tapering root, the leaf is strap shaped. Pkt., 10c; oz., 15c; 1/4 lb., 25c; lb., 65c; 5 lbs., \$2.50, postpaid.

PURPLE TOP STRAP LEAVED—It is round and flat, white on the bottom and reddish purple above ground, a very quick grower. It is esteemed as a fine table variety. Pkt., 10c; oz., 15c; 1/4 lb., 25c; lb., 60c; 5 lbs., \$2.50, postpaid.

PURPLE TOP WHITE GLOBE—Of a perfect globe shape, about six inches in diameter with smooth, white skin; flesh pure white, firm and crisp, and of quick growth. A good keeper and is fine for market. Pkt., 10c; oz., 15c; 1/4 lb., 25c; lb., 60c; 5 lbs., \$2.50, postpaid.

GOLDEN BALL—Medium size, globular table turnip. Flesh yellow, tender and very sweet.

AMBER GLOBE—A large variety, excellent for stock feeding.

WHITE GLOBE—A large white, somewhat flattened globe. Smooth and of good quality.

SEVEN TOP—A variety much grown in the South for the tops, which are used as greens.

YELLOW ABERDEEN—Large, smooth globe shaped, with yellow flesh and skin.

Price of any of the above, except where noted: Pkt., 10c; oz., 15c; 1/4 lb., 25c; lb., 60c, postpaid.

RUTABAGA

AMERICAN PURPLE TOP—This strain is of American origin, bred to a smaller top and short neck. The bulbs are of great size, yellow fleshed and purple crown, one of the most desirable varieties now cultivated. Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., 75c, postpaid.

A good Garden is the result of these factors—
Good Seed is one factor.

Good Soil, with ample fertility, is another,
Careful plowing and thorough cultivating is
another,

Keeping the weeds out, and a dust mulch on
surface of ground insures quick growth, another,
Watchful care in spraying against insects is an
other,

Thinning plants to correct distance apart gives
better quality, is another,

Favorable weather, rains at intervals, or thorough
saturation of the ground at regular times is im
portant,

When all of these have been followed the result
should be a satisfactory Garden.

Vegetable Plants

For the benefit of those of our customers who do not have green house facilities we grow, each year, the leading varieties of those vegetable plants that should be started under glass, and hardened in cold-frames. We grow these in large boxes called "Flats," usually containing 144 plants to

the flat. These can only be shipped by freight or by truck. We can remove the plants from flat and pack with soil, or with moss for shipment by Parcel Post. Should you wish to purchase in flats, we can furnish Cabbage and Tomato Plants at \$1.00 per Flat; Cauliflower, Celery, Egg Plant and Pepper Plants at \$1.50 per Flat, all F.O.B. Wichita.

Following prices are postpaid.

	Strong	Doz. per 100
2 year plants	.45	\$1.75
Washington Asparagus	.65	2.25
HORSERADISH ROOTS—		
Strong sets	.35	2.00
RHUBARB ROOTS— Two year roots, or divided roots	1.25	8.50
CABBAGE PLANTS— Strong, hardy plants, all varieties	.25	1.75
CAULIFLOWER— Early Snowball	.35	2.00
CELERY PLANTS—	.35	2.00
EGG PLANT—	.35	2.00
PEPPER PLANTS— All varieties	.35	2.00
TOMATO PLANTS— All varieties	.25	1.75
Ask for Prices in large Quantities.		

SWEET POTATO PLANTS. These will be ready for shipment about May 1. We tie 100 plants of each variety in a bunch, and we cannot handle orders for less than 100 plants of any variety.

Yellow Jersey	Write for Prices
Nancy Hall,	
Red Bermuda	
Porto Rican	

ONION SETS

	Per lb.
Yellow	.25c
White	.25c
Red	.25c

Prices on larger quantities will gladly be supplied on application.

SHIPPING DATES

Asparagus, February 15-April 30.
Rhubarb, February 10-April 30.
Horseradish, March 10-April 15.
Cabbage, March 20-May 25.
Cauliflower, March 20-May 1.
Celery, May 10-June 10.
Egg Plant, April 5-May 31.
Pepper, April 5-May 31.
Tomato, April 1-May 31.
Sweet Potato, April 15-June 15.

Onion Plants

CULTURE—For those who desire an early crop, either for table use or for local marketing, these plants will prove most desirable, and the fact that they are inexpensive and call for the minimum of labor and trouble in growing the crop has created an ever increasing demand for them. In this climate they may be set out any time the ground is open after February 15th, until latter part of May. Plant in rows 14 to 18 inches apart and from three to four inches apart in the row. A light freeze or heavy frost does not injure the plants.

CRYSTAL WHITE WAX—(Bermuda)—The most attractive onion. It is an absolutely pure white Onion with a most beautiful waxy appearance that makes it sell on sight in all markets. It is deliciously tender and can be eaten raw like an apple. 100 for 35c; 200 for 65c; 500 for \$1.25; 1,000 for \$1.75, postpaid. Per crate, 6,000 plants, 5.50 delivered in Oklahoma and Kansas.

YELLOW BERMUDA—It is the standard variety with the large commercial Bermuda Onion growers. It is a light straw-colored onion. Our special stock of this ripens early, is of the best color, large size, and is the heaviest yielder. 100 for 30c; 200 for 55c; 500 for \$1.00; 1,000 for \$1.60, postpaid. Per crate, 6,000 plants, \$5.25 delivered in Oklahoma and Kansas.

In ordering Onion Plants please give date you wish them to reach you, otherwise we will ship as seems best.

They may be set in the open field as early as you plant Onion Sets.

Immediate shipment can be made from our growing station in Texas.

Prices subject to change without notice.

Ask for prices in larger quantities stating how many you wish.

Frost Proof Cabbage Plants

CULTURE—The market gardener who grows cabbage for shipment or for the market must have extra early maturing cabbage if he wishes to get the highest prices. The home gardener who desires earliness and who wants to avoid the trouble of sowing cabbage seed and give the necessary protection to early sown seed and plants, will find our Frost Proof plants to be a great convenience. We can fill orders from December 1st to May 15th. The plants when received will be somewhat wilted and have a hard stunted appearance, which will be disappointing to persons who have never used these plants before. Regardless of appearance they will produce good crop results.

VARIETIES: Copenhagen Market, Early Jersey Wakefield, Charleston, Large type Wakefield and Early Flat Dutch.

Prices by parcel post, postage paid: In lots of 100, 200, 300, or 400 plants at per 100 plants, 65c; 500 plants for \$1.75; 1,000 or more at \$2.50 per 1,000 plants. Per crate, 3,000 plants, \$4.75 delivered in Oklahoma and Kansas.

Orders are filled by the 100, not 250 or 350. These prices are for even quantities of one variety to package; if you ordered 200 of one variety and 300 of another variety you would pay at the 100 rate.

Order Early to Get Plants Delivered in Time

When we receive your order for these plants, we have to forward it to our growing station, which takes several days. Plants are shipped direct to you from our growing station. Plants cannot be pulled or shipped when beds are wet. We sometimes have a week or ten days of continued wet weather which prevents shipment. If you do not receive your plants as soon as you expect them, you will know that weather prevents shipment. Send your order two to three weeks before you expect to set the plants and you will get them in time.

Prices subject to change without notice.

Strawberries

CULTURE—Grow your own Strawberries this year and enjoy them early and late. Plant enough to have a surplus for preserving. There is no fruit as good as Strawberries, and if you grow your own there will be none so cheap. Set out the plants one foot apart in rows two feet apart. Keep well cultivated and the runners trimmed back when they are too straggley. The bed will bear heavily for three years and even longer, though it pays to put in a new bed after three years.

DUNLAP—A mid-season variety. Small vigorous plants with long fibrous roots, making them exceedingly strong. The plants produce a heavy crop of fruit, and the berries hold up well in size clear to the end of the season. The amateur, in doubt as to what to use for his home garden, will undoubtedly find Dunlap the best variety. 25 plants, 60c; 50 plants, 85c; 100 plants, \$1.50; 500 plants, \$3.50, postpaid.

AROMA—Late. One of the most popular for market. Fruit large to very large, holds its size well throughout all the pickings. Berry is roundish, conical, smooth and perfect in form and of a beautiful bright glossy red, very firm and of high quality. Its aromatic flavor has suggested its name. 25 for 60c; 50 for \$1.00; 100 for \$1.75, postpaid.

PROGRESSIVE EVERBEARING—These are truly everbearing, producing fruit continuously from late spring till a hard frost. The plants are set as early in the spring as possible, just like other strawberries. For the best results the blossoms should be kept picked off till the last of June or the middle of July. About August first you can commence picking fruit, real, ripe, delicious Strawberries, and continue to get them till freezing weather. And remember that this is all done the first summer, only a few weeks after the plants are set out. The second year the plants can be allowed to fruit in the early spring and continue all through the summer and early fall. Every home garden should have a row or so of progressive Strawberries. 25 plants, 75c; 50 plants, \$1.15; 100 plants, \$2.00; 500 plants, \$6.50; 1,000 plants, \$12.00, postpaid. By express collect, 500 plants, \$5.50; 1,000 plants, \$10.50.

MASTODON—The world's greatest everbearer, none other approaches it at this time, heaviest bearer of good size berries, fruits from August to November the first year. In size, quality, flavor and appearance Mastodon heads the list. Unlike other everbearers, the plants of Mastodon are large, vigorous, heavily crowned and deep rooted. 25 for \$1.50; 50 for \$2.75; 100 for \$4.00, postpaid.

THE FARM GARDEN

COOPERATIVE EXTENSION WORK IN AGRICULTURE
 Kansas State Agricultural College AND HOME ECONOMICS
 and U. S. Department of Agriculture STATE OF KANSAS
 Cooperating
 Extension Service

GARDEN AND NUTRITION PROJECT
 GARDEN PLAN (Revised by H. L. Lobenstein)
 Manhattan, Kansas

GARDEN PLAN

Width of Row Feet	Row
4	1 Grapes
10	2 Grapes
6	3 Asparagus
4	4 Winter Onions Rhubarb
3	5 Strawberries
3	6 Strawberries
3	7 Onions (Sets) Onions (Plants or Seed)
2½	8 Cabbage—early and mid-season (Follow with lettuce and radishes)
2½	9 Peas—early (Follow with late beets and carrots)
2½	10 Peas—mid-season (Follow with beans)
2½	11 Lettuce (Follow with late cabbage) Radishes (Follow with late cabbage)
2½	12 Spinach (Follow with cucumbers) Swiss Chard or Kale (Follow with cucumbers)
2½	13 Beets
2½	14 Carrots
2½	15 Parsnips
2½	16 Beans—green (Follow with radishes) Beans—wax (Follow with lettuce)
2½	17 Beans—bush lima
5	18 Tomatoes—early and mid-season (Follow with fall spinach with kale)
3	19 Peppers (interplant with cucumbers) Summer squash
5	20 Winter squash (interplant with late tomatoes)
6	21 Melons (interplant with tomatoes)
3	22 Sweet corn
3	23 Early Midseason Late
3	24 (interplant with pumpkins)
3	25

It is necessary to set the Garden Plan in one column

The rows may be any length desired

We are indebted to Mr. Henry L. Lobenstein, Horticultural Specialist, Extension Division, K. S. A. C. for the Farm Garden plan, and the following matter about Farm Gardens. We regret the lack of space which prevents publication of the entire treatment of the subject, which is an excellent presentation of this important matter. We hope that everyone reading this matter, and who is interested in a Farm Garden will write to the proper address asking for a copy of the Farm Garden.

"Every successful garden should be carefully planned well in advance of the planting season. This planning does not necessarily mean the setting down of the exact amounts and locations of each vegetable or fruit but rather a listing of those which will be planted. After a list has been made, the amounts of each fruit or vegetable to be planted is determined and the total establishes the size of the Garden.

The amounts to be planted of each kind depends upon three factors, size of the family, the like or dislike of each fruit or vegetable by the family and the adaptability or yielding capacity of the fruit or vegetable in the particular part of the state in which the garden is located. The perennial fruit and vegetables are an essential and necessary part of every Kansas garden and no garden is to be regarded as complete unless due attention has been given to the planting and proper care of the following fruits and vegetables: Grape, Strawberries, Asparagus, Rhubarb, Winter Onions, Horse Radish, Raspberries, Blackberries, Gooseberries, and Currants—depending upon local conditions.

"In the garden plan, as outlined in the subject matter, Row 1-6 include these fruits and vegetables and the remainder of the plan is devoted to annual vegetables. Of the many annual vegetables which may be planted, a number are more essential than others and this fairly small number should be completely represented in the garden.

Lettuce	Parsnips	Beets	Cucumbers	Spinach
Radish	Peas	Beans	Cabbage	Squash
Carrots	Sweet Corn	Tomatoes	Onion	Turnips
Peppers				

"Others such as egg plant, okra, swiss chard, broccoli, brussels sprouts, Chinese cabbage, cauliflower, kohlrabi, kale, muskmelon, watermelon, pumpkin, celery are not necessary to complete the garden but are

valuable additions to the above list. Planting of these vegetables are usually governed by individual preference.

"Unless a ready market is available the size of the garden should be fitted to the size of the family. A small well cared for garden often out yields one that is too large and therefore often neglected.

The garden should be near the kitchen. Few housewives have the time or inclination to walk half a mile on a hot July morning in order to get vegetables for the noon-day meal. Another reason for having the garden near the house is that much of the hand work such as weeding can be done by the various members of the family during odd times. Particularly in the western part of the state, irrigation is needed in the garden and the farmyard windmill often provides a satisfactory and economical source of water for this purpose.

"Plant the garden in long, well spaced rows. This will permit a large part of the cultivation to be done by horse drawn implements, and the time necessary to keep the garden clean will be materially reduced. However cultivation by means of implements will not entirely displace hoeing and weeding. These two practices must receive careful and constant attention. A very important item in garden care is the timeliness of cultivation and weeding. Weeds and grass can be most successfully combated by plowing, hoeing and weeding when these pests first appear. Being as a whole, very shallow rooted, vegetables are quickly and easily harmed by weeds and grass growing about them, and a garden of any type can be successful only when it is kept from weeds and grass of every sort. If the worth or value of a garden is to be determined, accurate cost records must be kept and these include as one of the major items, the time spent in caring for the garden.

"A good vegetable of high quality is always one that grows quickly and without being checked. This is especially true of the leaf and root crops."

Kansas gardens can be criticized more for shortness of season than for any other fault, correct this by planting fewer, smaller amounts at a time and plant oftener. For instance, in the farm garden, green beans are usually planted but once, while by making three or four plantings at regular intervals, this vegetable can be readily available throughout the season. Other vegetables which should be planted at regular intervals are; lettuce, radishes, peas, sweet corn, beets and turnips. Early and late plantings of carrots, tomatoes, cabbage, spinach and cucumbers should also be made.

"If you do not have a separate flower garden, by all means enlarge the farm garden enough to permit the planting of some flowers. The common annuals such as Nasturtiums, Phlox, Marigolds, Petunias, Zinnias, etc. are best adapted for this use and their care and presence will add zest and pleasure to the growing of the garden and, surely a bowl or vase of bright flowers will add much to the noonday meal."

For Aquariums and Pools

WATER HYACINTH—"The Queen of Aquatic Plants"—The petioles of the plant are inflated and serve as air chambers to keep the plant afloat. In shallow water the plants will take root and flower more freely than if floating. On a stem, about one foot in height it bears a loose spike of flowers, pale lavender blue. The bushy roots harbor spawn of goldfish. 3 for 50¢; postpaid.

PARROT FEATHER—Good for aquariums or pools. Leafage above and below water. In pools, plant at the edge in very shallow water, so its long runners will give beautiful coverage. 20¢, each; 3 for 50¢, postpaid.

SAGITTARIA—A splendid oxygenator for aquariums and pools. Has stiff, strap-like leaves, which grow under water most of the year, but plants send up tall leaves above water and blossom in summer. 15¢, each; 3 for 40¢, postpaid.

CABOMBA—Best known of all aquarium plants, grows almost anywhere. 15¢, each; 3 for 40¢, postpaid.

MYRIOPHYLLUM—Grows well in pools, tanks, etc., one of the best for aquariums, 15¢, each; 3 for 40¢, postpaid.

Water Lilies

Every pool needs at least one Water Lily. To get full size plants each bulb needs 4 cubic feet of soil, use a box 24"x24"x12" deep. We offer a few low priced varieties, can furnish higher priced ones if wanted.

MARLIACEA ALBIDA—A large pure white fragrant flower with yellow stamens. The sepals are tinted pink. Grows fast, blooms continuously the whole season. Each \$1.50, postpaid.

MARLIACEA CHROMATELLA—Charming yellow flowers from 4 to 6 inches in diameter with bright yellow stamens. The leaves are beautifully mottled with bronze-red. Flowers freely. Each, \$2.00, postpaid.

NELUMBINUM LUTEUM—(Lotus)—The old yellow. Each, \$1.25, postpaid.

Rock Garden Plants

Owing to lack of space, in this book, to list the various useful plants for this work—we will be pleased to mail you leaflet entitled Rock Garden Plants.



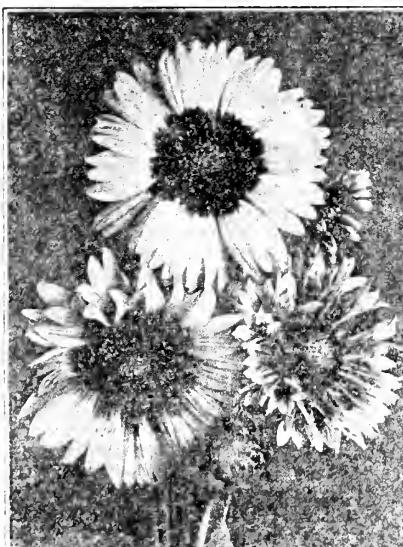
HARDY PERENNIALS

For the Midwest Garden in a typical season, **POPPIES** are at the height of their splendor. If the weather is hot and dry they bloom; if the weather is cold and wet they bloom. The large red Oriental Poppy is the showiest of the family. The bright **ICELAND POPPIES** are more continuous in their blooming and much superior for cutting. **HOLLYHOCKS** grow in Midwest whether they are taken care of or not. They respond to a little attention, however, by longer stems with greater profusion of flowers. They grow from five to seven feet tall. Our double sorts are truly double and are in the finest colors. Year after year, hot or cold, **GAILLARDIAS** give a very good account of themselves. The large showy flowers are striking in color effective either in the beds or when cut. The usual colors are copper-red, crimson and gold. For a continuous bloomer, perennial **PHLOX** is second to none for this country. Seeds of this are difficult to save and they frequently lie dormant for several months before sprouting. For that reason many of our customers prefer to start with our carefully grown plants. These are listed on page 34.

There are many spots in the yard, beneath trees, or in a shaded corner beside the house, where a garden is wanted, but where not every sort of flower will give satisfaction. For this garden choose the sorts that are well adapted to half shaded spots, and there are many such. **BELLIS PERENNIS** or **ENGLISH DAISY** with the handsome pink and white flowers are practically sure of succeeding with only the slightest attention. The tall dignified **FOXGLOVE** or **DIGITALIS** with the long spikes of blue, rose or white blooms should stand at the back, as a background for any garden of this kind. They bloom readily and while they are not serviceable as a cut flower they make a very satisfactory appearance in the bed. **CANTERBURY BELLS** or **CAMPANULA** are similar to a certain extent, tho the Canterbury Bells prefer a somewhat less densely shaded location. Their flowers are lighter and more graceful. **ANTIRRHINUM** or **SNAPDRAGON** is a shorter plant but with stems amply long for cutting. All shades of reds and yellows are included in our mixtures, in both the tall and the half dwarf types. These plants send out spike after spike of flowers continuously for the season.

Probably everyone is familiar with **COLUMBINE** or **AQUILEGIA**. These extremely graceful delicate flowers are easily raised from seed. The plants are vigorous and hardy, often remaining in full flower long after the early fall frosts have laid the rest of the garden low. Hardy, free-flowering **SWEET WILLIAMS** are a real joy to the busy garden lover who has not the time to devote to the garden that some other plants require. **CARNATIONS** have a similar, tho the longer, blossom, one of the very best for bouquets of any of the perennials. **BABY'S BREATH** is grown for its value in connection with cutting with other flowers. It serves the same purpose as the Florist's Asparagus Fern, but is much more attractive.

When grown together, or when brought together in a vase, **DELPHINUM** and **COREOPSIS** make as fine a combination of flowers as could be desired. Both are well adapted to this climate, being vigorous and hardy.



Gaillardia

The Delphinium flowers are dark blue, borne in spikes along the many stems that are shot up from the crown of the plant. The Coreopsis has deep golden yellow, daisy shaped flowers appearing all over the plant. Brought together they harmonize beautifully.

Plan your Perennial Garden carefully. Take a little time in preparing it. If done well, it will not have to be done over for many years. If done hurriedly, it may always be a source of regret. Be sure and allow space for plants to develop for at least 3 years.

SACCO will promote growth and add brilliancy to the blossoms. See Page 65.



Oriental Poppy

Flowers for the Hot Dry Garden

HOW often we hear the phrase, "How easy it must be to raise flowers in California" or "back East," or somewhere else. That is all true, but the fact is constantly overlooked that it is easy to raise flowers right here in Kansas. It is just as easy to raise flowers here, as it is anywhere else! That means that a certain selection of flowers is necessary, of course. You cannot expect to raise Cactus in Labrador, nor Water Lilies in a desert! Except in the polar regions and in extremely high spots, the entire world is filled with wild flowers of a thousand kinds.

This fact must be constantly kept in mind when planning the Home Flower Bed. Do not expect to raise the same kinds of flowers easily in the prairie country, that you have read about growing along the rocky bluffs of Maine, overlooking the ocean. No one who has ever spent a summer in Kansas has failed to notice the abundance of Sunflowers growing rampant as far as the eye could reach. Yet how few have seen the connection between the Sunflower and their own Flower Garden. If we, living in the Great Plains section of the United States, would but choose flowers having the same general characteristics as the Sunflower, we would have gardens flourishing literally like a weed.

For example, the tall graceful **MARIGOLD**. As hardy and as drought resistant as any Sunflower, yet it attracts favorable mention in any garden.

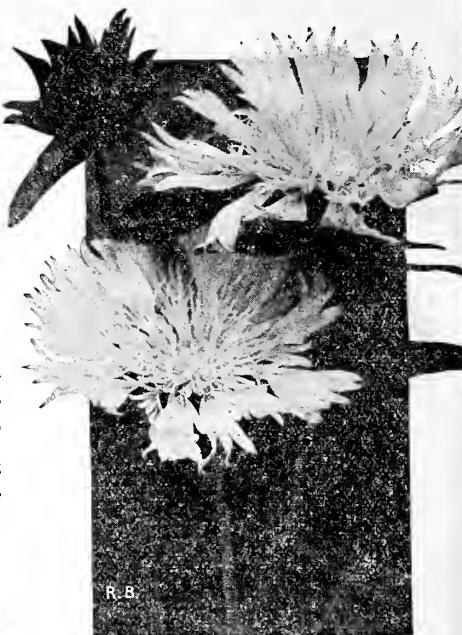
The gardener who cannot grow Marigolds successfully is about on a par with the cook who doesn't know how to boil potatoes. The little **FRENCH MARIGOLDS**

share the pleasing golden color of their taller relations, but their touch of dark brown gives them a more dainty effect. Akin to these are the **ZINNIAS**. Equally easy to raise, but more diversified as to color, as they boast large flowers in Scarlet, Golden-yellow, Flesh and Pure White. For cutting purposes no flower of this class can surpass the **CALLIOPSIS**. A short row of this bright yellow flower will keep the vases filled all summer. Its perennial cousin, the **COREOPSIS** resembles it closely, except that the blossom is somewhat heavier, and the color a trifle deeper.

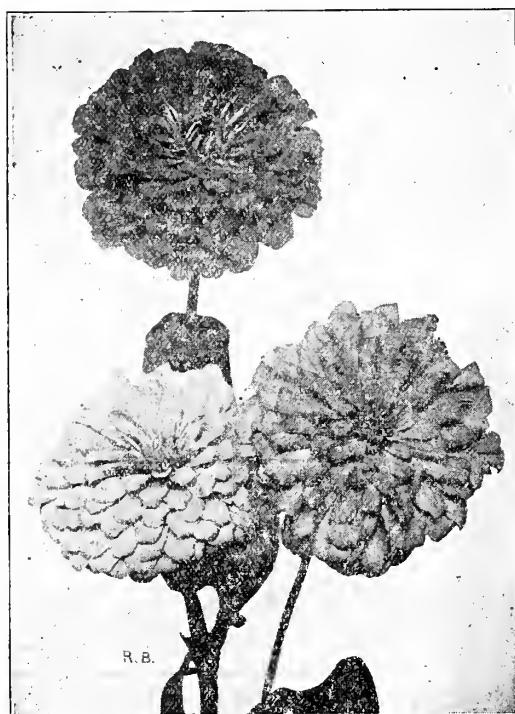
The mammoth trusses of **SWEET WILLIAM** are already popular here, and justly so, as they grow under nearly any treatment. **DIANTHUS** (or **PINKS**) and **CARNATIONS** fall into the same class, except that the Carnation is not a perennial. One of the most suitable flowers for any bed is the **CENTAUREA** or **BACHELOR'S BUTTON**. These are one of the very few dark blue flowers that will stand for hot weather without losing the brightness of color. Picked with some bright yellow flower such as **CALENDULAS** they make a handsome bouquet, that is universally pleasing. The last mentioned sort is another of the fool proof sorts that will just naturally succeed regardless. **DAISIES** have always been familiar, tho there are some later and more improved types that should be more widely introduced. The large bushy annual **ARCTOTIS GRANDIS** (African Gold Daisy) is one of the fine sorts. Perennial **SHASTA DAISIES** are too well known here to need further mention. Similar in form, but not in coloring are the **EVERLASTINGS**. Always plain in color, they are nevertheless valued for decorations, as they will last for years without crumbling.

For those willing to get their seed beds into really first class condition, we gladly recommend **PETUNIAS** and **PORTULACAS**. These are both well adapted to hot, dry locations, and will produce their dainty, bright colored flowers almost without number. Another that we must not forget is the **PHLOX**, a native of Texas, and well accustomed to the heat. Phlox has no superior for cutting or mass bedding. Another importation from a warm country is **MIRABILIS** or **MARVEL OF PERU**. This free flowering annual opens its bright blossoms on dark days and towards evening, which is the reason for its other name of **FOUR O'CLOCK**.

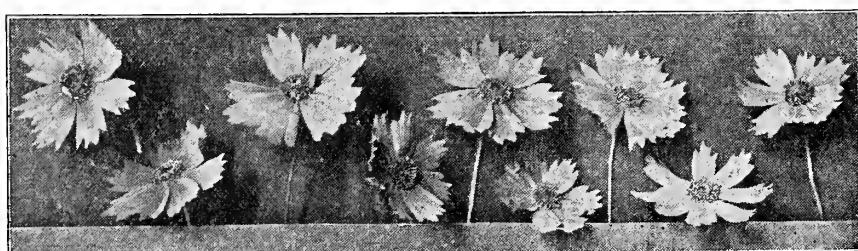
For bright colored foliage there is nothing which we can recommend more highly for the Middle West than **AMARANTHUS**, known more popularly in its various forms as **JOSEPH'S COAT** and **LOVE LIES BLEEDING**. The foliage is of striking red or yellow particularly showy in the fall when other plants begin to show the effects of a long hot summer. There are, of course, other flowers that will flourish under the conditions prevailing in the



R.B. Bachelor's Button (*Centaurea Cyanus*)



R.B.



Middle West but we believe that the beginner in flower raising, as well as those who have had difficulty in getting the kind of results they wanted, will do well to be guided by this list at the start. After becoming familiar with a few of the tricks, or rather knacks, in the art of raising flowers to satisfaction it will be time to try some of the other and more difficult types. These remarks apply, in the main, to those gardens exposed to the sun and wind, and not located so as to receive any great supply of water.

Cutting Annuals

A HOUSE full of flowers, from early spring till winter. That is nearly every housewife's desire, and it can be attained through a tiny flower garden with proper planning. It is necessary to get into the garden early in the spring to get the ground in good condition and the seeds planted just as soon as warm weather comes. Nearly all of the early blooming sorts can be planted as soon as the ground is in shape. Some of the later ones are sensitive to frost and must wait for settled weather. **SWEET PEAS** are among the first of the flowers to appear, if planted sufficiently early, or in the fall before. They, of course, are in nearly every color in the rainbow. See page 28 for a full description.

CALENDULAS may be planted very early and are rapid growers. Their large bright yellow blooms are always welcome on any table. To set them off to their best advantage some blue **BACHELOR'S BUTTONS** should be used in the same dish. The contrast is most pleasing. Red and brown **CALLIOPSIS** fairly radiate good spirits and they simply cannot be picked fast enough. Both tall and dwarf **MARIGOLDS** are the same. The Dwarf or French types are somewhat earlier than the Africans, but both last the whole season long.

Following the first early flowers come a succession of others. This does not mean, how-



Marigold

ever, that the first ones are thru. On the contrary most annuals last for the balance of the season, no matter when they first come into bloom. **LARKSPURS** are a greatly admired form. Some of our strains are almost as gorgeous and showy as the perennial Delphinium. The pinks and blues are the most unusual shades and they harmonize perfectly. **BABY'S BREATH** is a dainty and fine-feathered foliaged plant not showy in itself, but is a help in making bouquets of any kind. Used like Asparagus Fern for setting off larger flowers. Old fashioned **MIGNONETTE**, a synonym with fragrance. The green and white spikes are not particularly handsome, but they will fill a room with the most delicious odors, suggestive of deep forests, way off in the mountains. The large showy branching **CANDYTUFTS** embrace nearly all shades of red, purple and white. **NASTURTIUMS** are among the most popular flowers for cutting, needing little care. See page 30.

For mid-summer and fall blooming **BALSAMS** should be included in every garden. If kept well watered they are truly magnificent. If transplanted once or twice they prove to be nearly all double flowering. **CARNATIONS** with their beauty, fragrance and productiveness, should never be forgotten. Annual in their free-flowering habits, they can be wintered easily by a slight mulch late in the fall. **PINKS** have an even brighter range of colors and are just as fragrant, tho the individual blossoms are not quite as large. **POPPIES** are not fully appreciated as a cutting flower, as some people have trouble in getting them to last after being picked. This trouble can be avoided by picking the flowers very early in the morning, and getting them a little before they are fully developed. They are as hardy and as sure of flowering as any flower that we have and really should find a place in every planting.

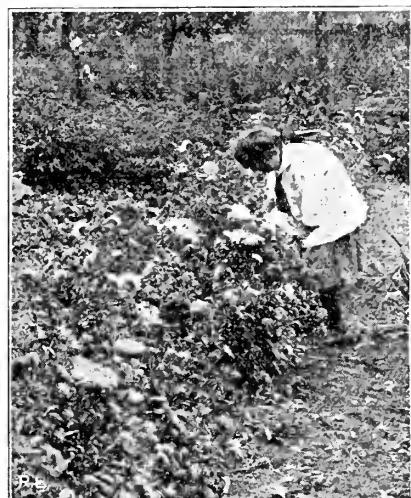
ZINNIAS. No cutting flower offers such a wonderful range of colors, types of flowers, length of stem and size of blossoms. Zinnias can be had in continuous bloom from middle of summer until killing frost, by sowing at intervals from April until September and they must be included in a popular list of Cutting Annuals.

Towards the close of summer and with the approach of somewhat cooler weather the **PANSIES** that were sown in the spring come to their prime. If kept picked and well fertilized, their myriads of richly colored flowers will grace many large bowls. Pick them with short stems and drop them into large shallow bowls to appreciate their loveliness to the full. **COSMOS**, too, is ready at this time to decorate the house. Its own foliage serves to set off the gay colors to good advantage. **ASTERS**, with all of their grace and charm, rarely fail to cease blooming till a heavy frost cuts the plants to the ground. **CHRYSANTHEMUMS** are said not to have sense enough to know when winter comes. At any rate, it is by no means unusual to be able to pick their large and showy blossoms after snow has fallen.

Plan your garden along some such lines as these and it is easily possible to be able to fill the house with fragrant flowers from early spring throughout the entire summer and until the approach of severe winter.



Calendula



Late Branching Asters

Flowers to Border the Garden, Walk or Drive

For general border work in this country **ALYSSUM** cannot be surpassed. It is hardy, prolific, easily grown and withstands the weather. The miniature white flowers bloom freely so that the plant appears as a veritable mound of white. Similar in habits of growth, but not in appearance, is the **AGERATUM** or **FLOSS FLOWER**. These are dark blue, and, like certain well known dyes, the color will not fade. The finest, bright yellow border flower is the **FRENCH MARIGOLD** which grows as freely and easily as Quack Grass in a corn field.

The well-known **NASTURTIUM** presents every shade of yellow and red. An easily raised flower and one of the best border plants for cutting. Our own mixture of Dwarf Nasturtium seed is composed of only the very finest colors, and is truly a joy to every flower lover. With the possible exception of Roses there is surely no flower as universally loved and admired as the **PANSY**. Delicate, modest, dainty, yet with strong, deep, but never flashy colors. It prefers a semi-shaded spot and plenty of moisture.

FLAX or **LINUM** makes a brilliant border—the annual form a bright red, the perennial dark blue.

PORTULACAS, with their wide range of brilliant colors are suitable to border a bed exposed to the hot sun. The lovely, graceful **NICOTIANA** flowers throughout the summer, adding to the beauty of adjacent plants.

In arranging any border, see to it that it harmonizes with the main part of the bed. It is only a frame for a picture, and must be made suitable.



Alyssum, Midwest Brand

Hedge Flowers

Hedges—the most neglected part of the Garden. Out of every hundred gardens well kept up in other ways, there are at least fifty or sixty that have paid no attention to their outside borders. The rear of the garden may have only an unsightly wire fence—there may be nothing to hide an unpleasant alley or drive at the side, or to partition the vegetable garden from the lawn. With all of the beautiful plants suitable for this purpose, well adapted to the Middle West, this is unnecessary.

A row of **HOLLYHOCKS** will serve the purpose admirably. They are perennial and consequently require but the minimum of care after once started. Both the double and single flowering forms come in many colors. The height is usually five to seven feet. The flowers appear at the sides of the main stem, blooming as the stem grows, so that fresh flowers may be seen practically all summer. **RICINUS** or **CASTOR OIL BEANS** make the tallest annual screens, growing from ten to fifteen feet, or more, in favorable seasons. The huge reddish leaves and the unique blossoms and spiny seed capsules are decorative at all times, and if planted close together they make a tight screen much higher than a person's head.

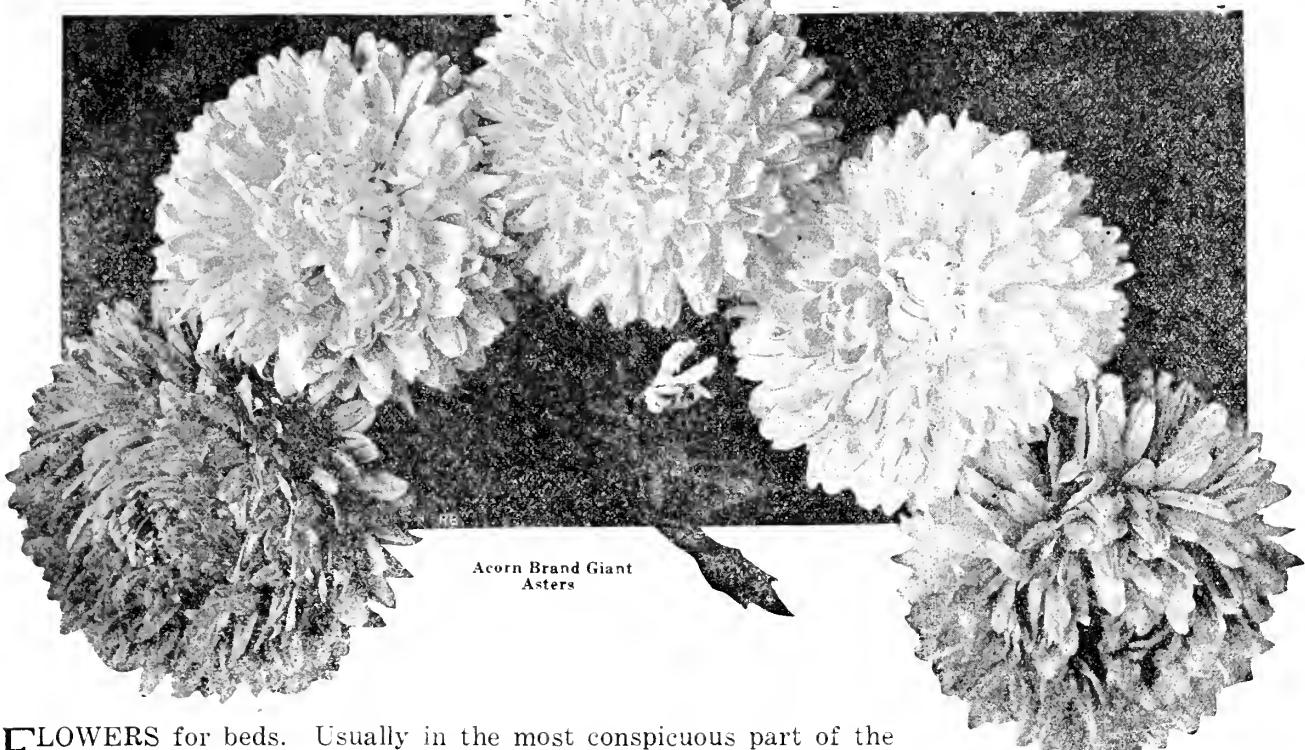
As a combination Hedge and cutting flower the **COSMOS** is unsurpassed. These are from four to six feet tall and bear the large brilliant flowers faster than they can be picked from August till frost. Probably the best known hedge plant in the Middle West is the **KOCHIA**, known also as **MEXICAN FIREBUSH** and **SUMMER CYPRESS**. This grows much in the form of Privet being two to three feet high, and a pleasing green all summer long. From early fall till severe winter the bush is a bright scarlet. The plants should be pulled when winter sets in, or they turn brown and unsightly. Mention should also be made of the **SUNFLOWER**. A hardy flower here, no one will deny. The improved forms which we have are really very decorative, and for planting at the sides or rear of the yard, they make a useful and ornamental plant.

Perhaps you have wondered about the unusual flowering bushy plants, covered with large heads of bright, rosy, crimson flowers, usually planted among shrubbery in parks and in other large plantings. This plant is **CLEOME** or **GIANT SPIDER FLOWER**. In addition to planting with shrubbery Cleome is an ideal hedge plant.

SWEET PEAS (discussed fully on page 28) can be used very effectively as a hedge or screen. Starting growth with the first warm days of Spring, by May they are a beautiful dark green, dotted with a myriad of bright flowers of every possible color. We have taken care to have a perfect balance of colors in our mixture, so that the effect is always indescribably pleasing. For gaiety and fragrance nothing can equal Sweet Peas. Near the time for hot weather start Castor Beans, or some similar plant, as Sweet Peas will wither down by the middle of Summer.



Hollyhock

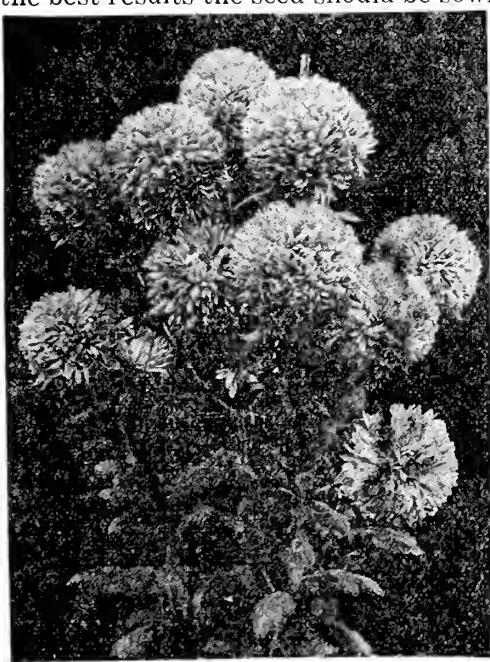
Bedding**Plants**

FLOWERS for beds. Usually in the most conspicuous part of the lawn. Proper selection is essential. Year in and year out our **SALVIA** or **SCARLET SAGE** is unequalled for the average person's needs. The long spikes of scarlet flowers are so numerous that the plant resembles a veritable ball of fire from mid-summer till frost. **ASTERS** are another favorite, the variety of colors being a great attraction. The late branching sorts give the best results for general purposes. The large flowers bloom from late August till frost. For the best results the seed should be sown indoors early in the Spring and transplanted when the weather is warm. **CHRYSANTHEMUMS** are another late blooming flower, fine in every way. These are the very showiest of the late sorts.

For formal effects **VINCA** is highly recommended. The leaves are glossy, the plant shapely and the richly colored flowers last the entire summer. **STOCKS** are another favorite for formal gardens. The flowers are brightly colored and very fragrant. If kept picked they flower continuously all summer, beginning early in July. **PHLOX** is a steady bloomer starting a few weeks after the seeds are sown. The brilliant colors are various and always pleasing.

The old fashioned gardens of our grandmothers always contained **SNAPDRAGONS** and it is gratifying to know that they are again becoming popular now. The spikes of the many soft colored flowers are splendid for cutting, as well as for making a fine display in the beds. We have two distinct types, Dwarf and Tall, being about 18 and 30 inches tall, respectively. **VERBENAS** if sown in hot beds in March and transplanted out with warm weather will bloom from June till frost. They may also be planted directly to the bed. Their colors are brilliant, but they are not as useful for cutting as many other sorts as the flowers have a tendency to fall to pieces when picked.

Nearly everyone wants at least a small bed of ornamental foliage plants. Chief of these is **AMARANTHUS**. These are tall plants with red or sometimes red and yellow leaves, particularly conspicuous in the fall. There is also a bright red flower, somewhat similar in form to a head of Kafir Corn. The conspicuous flower of the **COCKSCOMB**, together with the bright green, bronze or sometimes red foliage never fails to attract favorable comment. The flowers appear in the form of Plumes and Cockscombs.



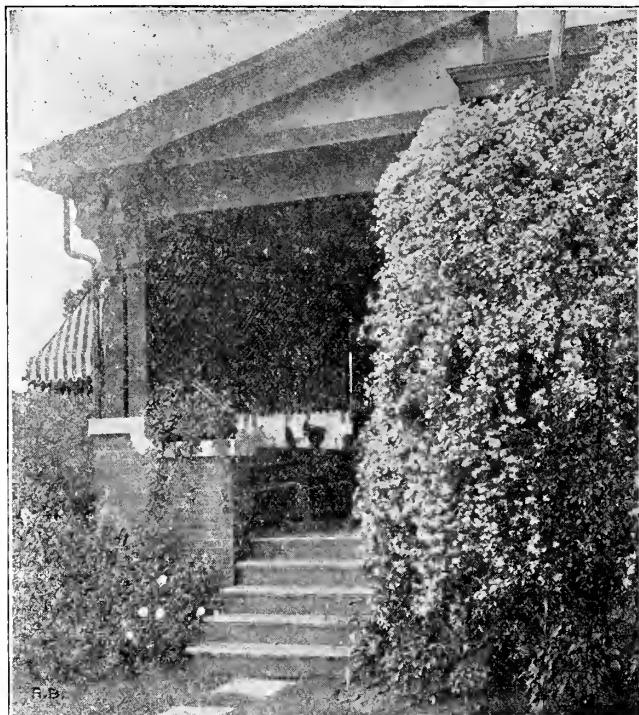
VINES

WHAT a world of variety there is in vines. The greatest range of form, fortunately, is with the annuals, which are the type mostly in demand. These make an exceedingly quick growth, giving dense shade to a height of ten to forty feet within a few weeks. The plant only lives for the one season, however.

BALSAM APPLE is one of the most commonly known plant vines in the Middle West. Its strong growth insures ample shade; the finely cut leaves and the curious fruits are ornamental at all times. The flower is small and yellowish white. Similar in many respects is the **BALLOON VINE**, whose small white flowers are followed by seed vessels resembling balloons. **WILD CUCUMBERS** may also be classed here. The foliage is much the same as that of the garden cucumber—bright green in color. The white flowers are borne in large clusters.

In the group of the Morning Glories, **CYPRESS VINE** is undoubtedly the leader. The dark green foliage is finely cut, setting off to advantage the star shaped scarlet flowers. For covering arbors any of this group may be used to good effect. They all grow rapidly, making a dense shade to a height of 16 feet or more. **CARDINAL CLIMBER** does 20 feet of vine and is covered with bright colored flowers. There is a free flowering sort known as **IPOMOEA, MEXICANA, GRANDIFLORA** in mixtures of pink, rose, white. The flowers open on cloudy days and towards evening, hence the common name of **MOON FLOWERS**. The **JAPANESE IMPERIALIS** is the finest of the true **MORNING GLORIES**, similar in many respects to the Moon Flowers excepting that the flowers appear early in the morning and wither with the heat of the day.

NASTURTIUMS, we are sure, need not be more than merely mentioned as they are well known to everyone. They do not grow as fast nor as tall as many of the other climbers but they are fine for covering stumps, fences and the like, **GOARDS** of all kinds are an interesting and handsome vine to grow. They attain a height of 15 to 20 feet. The **APPLE-SHAPED** is the most ornamental; **CALABASH** useful in making pipes of the finest kind;

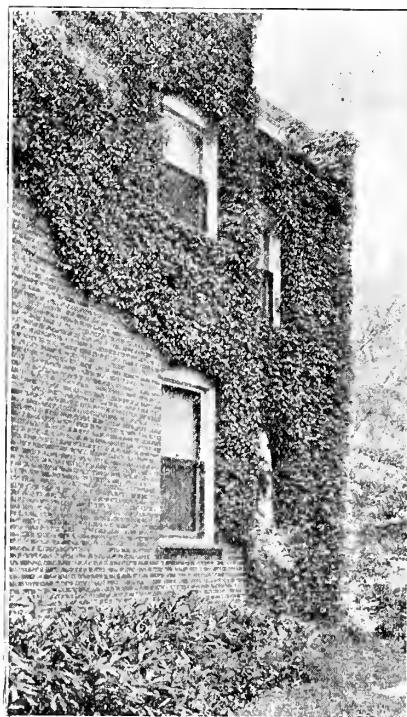


Clematis Paniculata

DIPPER is dried and cut for kitchen uses; **DISHCLOTH**, the inside of which is fibrous and tough, making fine cloths; **HERCULES CLUB**, novel, as the fruits are three to four feet long; **JAPANESE NEST EGG**, the fruits are used extensively by poultry men. We prepare a careful **MIXTURE** of all of these and a few other leading sorts each year. **SCARLET RUNNER BEANS**, while generally classed with the Garden Seeds, belong here also. The beans are deliciously edible and the Scarlet flowers and pods are highly ornamental. **HYACINTH BEANS** or

DOLICHOS have similar flowers, only they are more pea-like and the pods are smaller. The blossoms are either snow white or rose-violet with the seed pods always the same color as the seed.

Perennial vines are slower in growth, but for permanent locations are vastly superior to the annuals. **KUDZU VINE** is the fastest growing plant known, making fifty feet or more a season after it is once well established. We do not recommend it for prominent positions, however, as the foliage is rather coarse. For covering barns, sheds and other places to the rear of the grounds it is absolutely the best vine known. **CLEMATIS PANICULATA** is a rapid growing sort that is highly prized for its dark green leaves and for the clouds of white flowers appearing early in September and lasting until cut by frost.



What Kind of Lawn Grass Do You Use?

Does it give you the sort of a lawn that you want? You know there are a good many sorts of grass. Some of them are suitable here, some are not.

MID WEST MIXTURE is composed of only the varieties that are adapted to the Middle West.

See back cover page of this book for Lawn Grasses. Sacco makes things grow. Page 65.

Flowers for Shady Places

PANSIES planted in boxes or hot beds early in the spring and set out when the ground is warm, if given good fertilization will start into blooming well before the hot weather comes. During mid-summer only a few blossoms will appear, but in the fall, every day will see a host of fresh flowers. Pansies may be planted during August and September in the open ground for early spring blossoms. Cover with light mulching during winter months. The pansy is one flower that will never grow tiresome. **FORGET-ME-NOTS** are among the very first flowers of spring, and with slight protection will weather the winters here perfectly. The plants are dwarf, with feathered foliage and dainty dark blue flowers. For an attractive, hardy annual that will grow in any soil plant **GODETIAS**. Their large velvety flowers in bright colors bloom profusely the entire summer. The plants are about a foot tall. The **COLUMBINE** or **AQUILEGIA** is handled more easily from seed than any other hardy flower, and no flower has more favorable points. Seed planted in the spring will produce flowering plants the same season. The whole plant, as well as the flower itself, is full of grace, airiness and charm and serves to brighten up a stiff planting. The flowers are borne abundantly even after frosts have killed the rest of the garden. **FOXGLOVE** or **DIGITALIS** is being used more freely every season for planting amongst tall shrubbery beneath trees, and in other partly shaded spots. The tall plants produce a wealth of bloom during June and July. **BELLIS PERENNIS** or **ENGLISH DAISIES** (with protection during the winter) flower freely from early spring till well along in the summer. The plant is an improved form of the Double Daisy. Each flower is fully double, pure white and pink.

Perennial Seeds for Rock Gardens

The demand for seeds of Rock Garden flowering plants is insistent. We have grouped together, on this page, the most desirable perennial plants for this purpose. Of course many other flowers can be used to advantage in the Great Plains region. Some of these are, Nasturtiums, both dwarf and trailing, Pansies, Phlox, Poppies, Scabiosa, Verbena, Zinnias, Dwarf and small flowering varieties, Dwarf Marigolds, Candytuft.

ALYSSUM—Saxatile Compactum—Golden Yellow, 9 in., June. Pkt., 10c.

AQUILEGIA—Alpina—Blue, 12 in., Spring. Pkt. 15c.

ARABIS—Alpina—White, 6 in., Summer. Pkt., 10c.

ARMERIA—Formosa—Red, 9 in., Early Summer. Pkt., 10c.

ARENARIA—Montana—White, 12 in., June-August. Pkt., 25c.

ASTER ALPINUS—Goliath—Soft blue, large flowered, 10 in. Pkt., 20c.

CAMPANULA—Carpatica—Blue, 9 in., July-August. Pkt., 10c.

CAMPANULA—Carpatica Alba—White 9 in., July-August. Pkt., 10c.

DIANTHUS—Deltoides—Rose, 8 in., Summer. Pkt., 25c.

DIANTHUS—Plumarius—(Clove Pink) Mixed, 6 in., Summer. Pkt., 25c.

ERINUS—Alpinus—Mixed White, Carmine and Rose, 4 in., May-July. Pkt., 25c.

FORGET-ME-NOT—Alpestris—Blue, 4 in., May-June. Pkt., 10c.

GYPSOPHILA—Repens—White, 6 in., Summer. Pkt., 15c.

HEUCHERA—Sanguinea—Crimson, 30 in., June. Pkt., 25c.

LINARIA—Dalmatia Macedonica—Yellow, Orange Lip, 4 in., May-June. Pkt., 25c.

LYCHNIS—Alpina—Rose, 4 in., Summer. Pkt., 20c.

POPPY—Alpine—Mixed colors, 6 in. Pkt., 35c.

PRIMULA—Japonica—Mixed, White, Purple, Lilac, Carmine, 15 in., Spring. Pkt., 15c.

PYRETHRUM—Roseum—(Painted Daisy) Hybridum Grandiflorum, Single Mixed, Summer. Pkt., 15c.

SEDUM—Acre—(Golden Moss) 3 in., Yellow, June-July. Pkt., 25c.

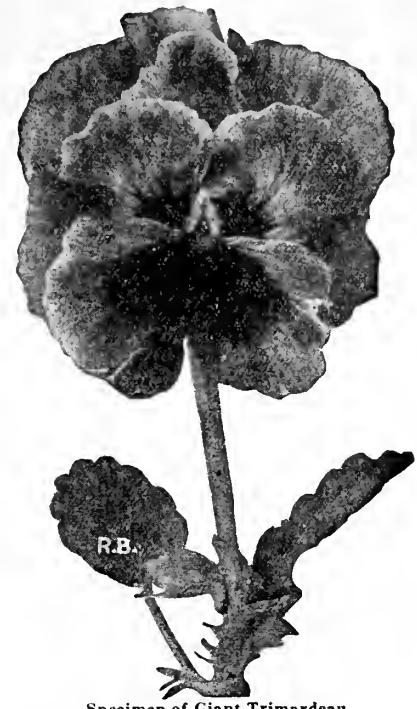
STATICHE—Incana Alba—12 in., small pearly White Flowers, Summer-Fall. Pkt., 15c.

VIOLA—Gracilis Lord Nelson—Glowing violet purple, 6 in., April-August. Pkt., 35c.

In addition to seeds for Rock Gardens, we can supply many plants. Please ask for our list of Rock Garden plants.

STIM-U-PLANT

A highly concentrated fertilizer. Easily handled. Gives immediate returns. Comes in tablet form with no objectionable odors. Contains very high percentage of immediately available fertilizers. A tablet broken up and put around a plant in a pot, or out in the garden will do wonders with it. Very economical. Packages priced at 15c, 25c, 75c and \$3.50. Do not fail to order a package of these.



Specimen of Giant Trimardeau

SACCO makes things grow, when used according to directions.

SPRAY to rid plants of insects and fungus.



Send for ACME SPRAY CHART. Tells how and when to Spray to control bugs, and Fungus growths.



board to cover the trench in severe weather. By planting in the fall and winter the plants grow a stronger deeper water over night before sowing. Use one ounce to 8 feet of row.

SPRING SOWINGS should be made in a furrow 12 inches deep, fill in three inches of good rich soil, sow seed and cover with two inches of soil, and the trench filled in as the plants grow. It is a help to soak the seeds in luke warm water over night before sowing. Use one ounce to 15 feet of row.

STAKING will be necessary as the plants will grow to a height of six feet or more. Good twiggy boughs are the best for this purpose. If these are not available a six-foot wire netting will serve the purpose. An easier way is to drive long heavy stakes every five or six feet, and tie jute twine across every six or eight inches.

SWEET PEAS

Sweet Peas are more than flowers, they are a necessity for every garden. They lend themselves readily and easily to beautifying schemes of the city and country farmer.

Division fences between lots in town, fences across the back lots, and the unsightly spots that are a blemish to an otherwise beautiful home can be blanketed in beauty by the use of Sweet Peas. Sweet Peas should form no small part of your summer garden scheme. Sweet Peas include a wider range of colors than any other flower we know.

Sweet Peas are not hard to grow.

Hints About Growing Sweet Peas

LOCATION. Any sunny location will be suitable that is well drained, and that will get free circulation of air. The ground should be dug up to a depth of two feet and filled in with good soil mixed with rotten or pulverized manure. A top dressing of Sacco plant food at the rate of two pounds to each 25 foot row, applied as soon as the plants reach the surface soil, will give more brilliancy to the blossoms. This treatment can be made again at any time the plants show the need of food. Be certain to apply Sacco when plants are dry and soak into the ground the same day.

EARLY PLANTING is essential with Sweet Peas in order to give the roots a chance to develop more

rapidly than the tops during the cool weather. Early plantings produce blossoms before the intense heat of the summer comes which is likely to wilt the plants if they do not have well developed roots. In this latitude it is usually safe to plant about February first. Fall and winter sowings may be made at any time from fifteenth of November until the ground is frozen solidly. The trench should be dug at least two feet deep and filled in with six inches of good fertile soil, plant the seed, cover two inches with good soil. As the plants grow fill in the trench, always cover plants with loose soil, when sudden cold spell occurs, also use a

water over night before sowing. Use one ounce to 8 feet of row.

ROSS SUPERB MIXED SPENCERS. This is a careful blend of all the finest types of Spencers and includes a wonderful color range. Packet, 10c; ounce, 25c; one-fourth pound, 60c; pound \$2.00, postpaid.

ROSS SPLENDID MIXTURE, of Grandiflora Sweet Peas, comprises many of the best varieties. Packet, 10c; ounce, 15c; one-fourth pound, 40c; pound, \$1.25.

Ross Sweet Peas

Early Flowering Spencer

A new race of Sweet Peas, having the large waved flowers of the Spencer type, but flowering fully one month earlier, they also continue to flower for a much longer period. Excellent for Greenhouse planting and also for outdoor sowing.

ROSS SPECIAL MIXTURE Early Flowering Spencer, composed of many colors. Pkt., 15c; ounce, 60c.

Late Flowering Spencer

Nine named varieties of Spencer Sweet Peas. These are all outstanding, not only in color, but also in type of flowers.

AUSTIN FREDERICK IMPROVED—Large pure lavender.

COUNTESS SPENCER—Large pink.

CRIMSON KING—Rich ox-blood crimson.

KING WHITE—Pure white.

MAJESTY CREAM—Large deep cream.

MARY PICKFORD—Cream pink.

ROYAL PURPLE—Rich purple.

ROYAL SCOT—Brilliant scarlet.

YOUTH—White, picotee edge of pink.

Prices of any of the named Spencers: Packet, 10c; ounce, 30c; one-fourth pound, 90c.

Hardy Perennial Sweet Peas (Lathyrus Latifolius)

Showy free flowering perennial climbers for covering fences, old stumps, etc. They are in bloom for a long season, and are fine for cutting. Mixed packet, 10c; one-fourth ounce, 25c; ounce, 75c.

Sweet Pea Seed should be treated with Nitragin before planting. This will give much quicker root development.

H. A.—Hardy Annual.

A.—Annual.

P—Perennial

FLOWER SEED PRICE LIST

	Pkt.	1/4 Oz.	Oz.	Pkt.	1/4 Oz.	Oz.	
AGERATUM							
Mexican. Blue Perfection. 18 in. A.	\$.10	\$.25	\$.75	Giant White, 5-6 ft. A.	\$.10	\$.20	\$.50
ALYSSUM				Giant Red. 5-6 ft. A.	.10	.20	.50
Little Gem. White. 6 in. A.	.10	.25	.75	Giant Pink. 5-6 ft. A.	.10	.20	.50
ANCHUSA OR CAPE FORGET-ME-NOT				Giant Mixed. 5-6 ft. A.	.10	.20	.50
Blue. 18 in. A.	.10	.25		Early Mammoth Mixed. 5-6 ft. A.	.10	.20	.60
AMARANTHUS				Early Double Crested Mixed	.10	.40	
Love Lies Bleeding. Blood Red. 30-36 in. A.	.10	.25		DAHLIA			
Joseph's Coat. Variegated. 30-36 in. A.	.10	.25		Mixed	.10	.50	
ASTERS				DAISIES			
Early Branching. Mixed. 20 in. A.	.10	.40		African Daisy. Arctotis Grandis.			
Queen of the Market. Mixed. 12 in. A.	.10	.40		White with blue eye. 2-3 ft. A.	.10	.30	
Giant Branching Type. 30 in. A.	.10	.50		Dimorphotheca, Aurantica—Orange			
Crimson	.10	.50		African Daisy	.10	.75	
Shell Pink	.10	.50		Shasta Daisy. White. 2 ft. P.	.10	.75	
Purple	.10	.50		English Daisy. Bellis Perennis. Mixed.			
White	.10	.50		6 in.	.10	.75	
Mixed	.10	.40		DELPHINIUM OR PERENNIAL			
The King, mixed all colors	.10	.50		LARKSPUR			
General Mixture of all Asters	.10	.35		Gold Medal Hybrids. Blue. 4 ft. P.	.10	.60	
BABY'S BREATH OR GYPSOPHILA				Belladonna—Turquoise blue	.20		
Paniculata. Pure White. 30 in. P.	.10	.25		EVERLASTINGS			
Elegans, Grandiflora Alba	.10	.15	.35	Mixed. 2 ft. A.	.10	.25	
BACHELOR'S BUTTONS OR CORN FLOWER				Ammobium—"Winged Everlasting"	.10		
Blue, 24 in. A.	.10	.25		Gomphrena (Globe Amaranth) A.	.10		
Centaurea. Mixed. 24 in. A.	.10	.15	.45	Helichrysum (Strawflower) A.	.10		
Centaurea Imperialis, Mixed. A.	.10	.25		FLAX OR LINUM			
BALLOON VINE				Perenne. Mixed. 18 in. P.	.10	.25	
White. 12-15 Ft. A.	.10	.15	.35	FORGET-ME-NOT OR MYOSOTIS			
BALSAM APPLE				Alpestris. Mixed. 8 in. A.	.10	.40	
Vine. 10 ft. A.	.10	.35		FOUR O'CLOCKS OR MIRABILIS			
BALSAM OR LADY SLIPPER				Mixed. 2 ft. A.	.10	.15	
Double Mixed. 18 in. A.	.10	.25	.75	FOXGLOVE OR DIGITALIS			
CALENDULA OR POT MARIGOLD				Gloxiniaflora. Mixed. 4 ft. P.	.10	.40	
Mixed. 14 in. A.	.10	.25		GAILLARDIA OR BLANKET FLOWER			
The Ball, 14 in. A.	.25			Grandiflora. Mixed. 2 ft. P.	.10	.25	
CALLIOPSIS				GERANIUM			
Yellow. 20 in. A.	.10	.20	.50	Mixed	.10		
CANNA				GODETIA			
Mixed	.10			Mixed. 12 in. A.	.10	.25	
CANTERBURY BILLS				GOURDS			
Campanula. Double Mixed. 4-5 ft. P.	.10	.50		Mixed. 12-30 Ft. A.	.10	.25	
CANDYTUFT				HIBISCUS OR MARSH MALLOW			
Mixed. 12-15 in. A.	.10	.15	.45	Deep Pink bell shaped flower. 3-5 ft. A.	.10	.25	
CARDINAL CLIMBER				HOLLYHOCKS			
Small red flowers	.10	.30		Single Mixed. 5-7 ft. P.	.10	.25	.80
CARNATIONS				Double Mixed. 5-7 ft. P.	.10	.40	1.00
Margaret, Mixed, 18 in. H. A.	.10	.50		Alleghany Mixed. 5-7 ft. P.	.10	.40	1.00
CASTOR BEAN OR RICINUS				HYACINTH BEAN OR DOLICHOS			
Zanzibarensis. Mixed. 12 ft. A.	.10		.25	Mixed. 15 ft. A.	.10	.20	.20
CHRYSANTHEMUMS				JAPANESE HOP			
Mixed. 18 in. A.	.10	.20	.50	Rapid summer climber, annual	.10		
COCKSCOMB OR CELOSIA				KOCHIA OF MEXICAN FIREBUSH OR SUMMER CYPRESS			
Cristata. Red. 8-10 in. A.	.10	.50		Green turning red in fall. 3 ft. A.	.10	.20	.50
Plumosa or Ostrich Plume. Mixed. 2 ft. A.	.10	.25		KUDZU VINE			
CLEOME OR GIANT SPIDER FLOWER				Dense shade vine. 20-25 ft. P.	.10	.20	.60
Rosy-crimson Flowers. 3½ ft. A.	.10	.25		LANTANA			
COLUMbine OR AQUILEGIA				Hybrida Dwarf. Mixed	.10		
Mixed colors. 2 ft. P.	.10	.30		LARKSPUR			
COREOPSIS				Tall Double Mixed. 3-5 ft. A.	.10	.25	
Lanceolata Grandiflora. Yellow. 2 ft. P.	.10	.25		Dwarf Rocket Mixed. 2-3 ft. A.	.10	.25	
CYPRESS VINE				LUPINS			
Mixed. 15 ft. A.	.10	.15	.50	Finest Mixed	.10	.15	

MARIGOLD

	Pkt.	1/4 oz.	oz.
African Double Mixed, 2 ft. A.	\$.10	.20	
French Tall Mixed, 2-3 ft. A.	.10	.20	
French Dwarf Mixed, 20-24 in. A.	.10	.20	

MOONFLOWER

Mixed. 15 ft. A.	.10	.20	.50
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MORNING GLORY

Japanese Imperialis. Mixed. 15 ft. A.	.10	.15	.30
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NASTURTIUMS

The tall variety, when planted in beds, grow about twelve inches high, then trail or vine covering the ground with a rank growth of foliage, thus protecting the roots from sunburning and insures long stemmed flowers in great profusion. Dwarf Nasturtiums have their place in the garden and give most pleasing effects in borders for beds or shrubbery.

Tall or Trailing Nasturtiums	Pkt.	oz.	1/4 Lb.
Chameleon, red and yellow	\$.10	.20	
Dunnett's Orange—Bright Orange	.10	.20	
King Theodore, dark red and dark foliage	.10	.20	
Pearl or Moonlight, ivory white	.10	.20	
Twilight, rose pink	.10	.20	
Vesuvius, deep apricot	.10	.20	
Ross Splendid, mixture of Dwarf varieties	.10	.15	.45
Ross Superb, mixture of tall varieties	.10	.15	.40

NICOTIANA

	Pkt.	1/4 oz.	oz.
Affinis Hybrida. Variety colors. 2-3 ft.			
A.	.10	.30	

PANSIES

	Pkt.	1/4 oz.	oz.
Ross Special Mixture — comprising all sorts of large flowering pansies. H. A.	.20	.25	
Giant Trimardeau. Mixed, 6-8 in. H. A.	.10	.75	
Fine Mixed. 6-8 in. H. A.	.10	.40	

PETUNIAS

	Pkt.	1/4 oz.	oz.
Balcony Type, Of trailing habit. A.			
Balcony Mixed Colors			.25
Portland Type.			
Elk's Pride. Plain, edged back-purple	.25		
Pride of Portland, Deep rose, fringed	.25		
Scarlet Beauty, Scarlet, fringed	.25		
Large Single Flowering Type.			
Brilliant Rose, fringed	.25		
Pink Glory, very large	.25		
Purple Prince, rich velvety	.25		
Fluffy Ruffles, mixed colors. Finely fringed	.25		
Double Large Flowering Type.			
Ross Fine Mixture			.25
Giants of California Type.			
Ross Select Mixture			.25
Single Small Flowering Type.			
General Dodds, Blood red	.10	.50	
Striped and Blotched	.10	.50	
Single Fine Mixed	.10	.40	
Single Dwarf Small Flowering Type.			
Ross Best Mixture			.10 .75

PHLOX DRUMMONDI—12 in. A.

Ross Finest Mixed	.10	.40
Star or Cuspidata.		
Mixed, 12 in. A.	.10	.40
Decussata or Perennial.		
Mixed, 3 ft. P.	.25	1.25

PINKS OR DIANTHUS

	Pkt.	1/4 oz.	oz.
Double Mixed, 12 in. A.	.10	.25	
Single Chinese Mixed. 12 in. P.	.10	.25	

Plumarius Pinks are the old fashioned fragrant garden pinks. Double mixed

.10	.25
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POPPIES

	Pkt.	1/2 oz.	oz.
Single Annual Sorts. 2 ft.			
King Edward, Dark red	.10	.25	.40
Danish Cross. Red with white cross	.10	.25	.40
Tulip—(Glaucum) Scarlet	.10	.25	
Single Fine Mixed	.10	.20	.30
Shirley. Mixed	.10	.20	.30
California. Mixed Hybrida	.10	.20	.30
Double Annual Sorts.			
Peony Flowered, Mixed, 36 in.	.10	.20	.30
Fine Mixed. 2 ft.	.10	.20	.30
Oriental. Gorgeous red. 2 ft. P.	.10	.50	

PORTULACA—(Rose Moss)

	Pkt.	1/4 oz.	oz.
Single Mixed, 6 in. A.	.10	.20	.60
Double Mixed, 6 in. A.	.20	.75	2.50
Mixed			

SALPIGLOSSIS (Painted Tongue)

	Pkt.	1/8 oz.	oz.
Mixed			

SALVIA OR SCARLET SAGE

Bonfire. Scarlet. 2 ft. A.	.15	1.25
Splendens. Red. 2 1/2 ft. A.	.10	.75

SCABIOSA OR MOURNING BRIDE

Mixed	.10	
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SCARLET RUNNER BEANS

Scarlet vine. 10 ft. A.	.10	.20
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SNAPDRAGON OR ANTIRRHINUM

Maximum Giant Flowered, mixed, 32 in. H. A.	.15	.50
Tall Mixed, 2 ft. H. A.	.10	.40
Dwarf Mixed, 15 in. H. A.	.10	.40

STOCKS OR GILLIFLOWER

Ten Weeks Fine Mixed, 15 in. A.	.10	.75
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SWEET PEAS—(See page 28)**SWEET WILLIAM**

Single Mixed. Red shades. 2 ft. P.	.10	.25
Double Mixed. Red shades. 2 ft. P.	.10	.30
Annual Finest Mixed. 2 ft. A.	.10	.30

SUNFLOWER OR HELIANTHUS

Double Chrysanthemum Flowered. Yellow. 7 ft. A.	.10	.20
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TEXAS BLUE-BONNET OR

Lupine	.10	
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VERBENA

Hybrida Mixed, 12 in. A.	.10	.30
Defiance. Scarlet. 12 in. A.	.10	.35
Gigantea Finest Mixed	.25	.85

VINCA OR PERIWINKLE

Mixed. 15 in. H. A.	.10	.40
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WILD CUCUMBER

Vine. 12 ft. A.	.10	.30
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WOOLFLOWER-CHINESE

Double Mixed	.10	
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ZINNIAS

Seeds may be sown at intervals any time between the first of April and the last of August, and furnishing a continuous supply of cut flowers from early in July until killing frost, usually after October 15th, in this section.

	Pkt.	1/4 oz.	oz.
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Colossal or Double Giant Flowered, 2-3 ft. A.

Bright Rose	.10	.35
Burnt Orange	.10	.35
Crimson	.10	.35
Deep Flesh, Pink	.10	.35
Golden Yellow	.10	.35
Purple Shades	.10	.35
White	.10	.35
All colors, Double Giant, Mixed	.10	.30

California Giants, 2-3 ft. A.

Finest Mixed	.15	.50
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Dahlia Flowered, 2-3 ft. A.

Buttercup, Creamy yellow	.15	.60
Crimson Monarch	.15	.60
Exquisite	.15	.60
Old Rose	.15	.60
Polar Bear, pure white	.16	.60
Purple Prince	.15	.60
Scarlet Flame	.15	.60
Special Mixture	.15	.50

Elegans.		
Dwarf Mixed, 16 in. A.	.10	.25
Lilliput or Pompon.		
Small Double Flower, Mixed. 16 in. A.	.10	.30
Curled and Crested.		
Twisted petals. Fantastic forms. 2 ft. A.	.10	.40
Picotee.		
Double Fringed flowers, Mixed. 20 in. A.	.15	.50

Flower Seeds treated with Dubay Semesan before planting produce healthier, stronger plants and more blossoms.

BULBS

Caladium Esculentum or Elephant's Ear

The bulbs should be planted about six inches below the surface of the ground; water should be applied regularly, but in small quantities until after the foliage shows above the ground, then the plant requires plenty of water to produce large leaves. It is not unusual for leaves to measure between three and four feet long and 14 to 18 inches in width. These bulbs can be forwarded by parcel post if 5c extra per bulb is added to the order.

	Each Dozen
Size 7 to 9 inches in circumference	\$1.15 \$1.65
Size 9 to 11 inches in circumference	.25 2.50
Size 12 inches and up in circumference	.50 4.75

CANNAS

CANNAS can be had in varieties from two to ten feet high with several distinct colors of foliage and an enormous range of colors in the blossoms. Cannas can be grown effectively in circular beds as follows: In the center one plant, the first circle six plants, the second circle 12 plants, the third circle 18 plants and so on. Each circle takes six more plants than the one inside of it. The circles are made 18 inches apart.

AMBASSADOR—Four feet. Bronze foliage, color poppy red. Very brilliant flowers. 15c each; \$1.50 dozen.

CITY OF PORTLAND—3½ feet. A deep pink which does not fade during hot weather. Free bloomer, with flowers well above the foliage. 20c each; \$2.00 dozen.

HUNGARIA—Three and one-half feet. Fine pink bedder, with large flowers on trusses of good size, produces freely. Color, a beautiful clear rose. 15c each; \$1.50 dozen.

KING HUMBERT—Four-five feet. Orchid flowered. Bronze foliage. Flowers large, five to six inches across. Flower a glowing scarlet or orange-red, often streaked with gold. 10c each; \$1.00 dozen; \$7.50 per 100.

KING MIDAS—Five feet. Very large flower, beautiful glittering yellow canna with green foliage. 20c each; \$2.00 dozen.

MRS. ALFRED CONARD—Four feet. Green foliage, Flowers salmon pink of large size on finely shaped flower heads. 25c each; \$2.25 dozen; \$18.00 per 100.

THE PRESIDENT—Four feet. Color rich glowing scarlet. Flowers on sturdy erect stalks with large rich-green foliage. Petals frequently seven inches across. 10c each; \$1.00 dozen.

VENUS—Three-four feet. Green foliage. Flowers a gay, rosy pink, with borders and markings of cream and yellow. Large flowers and large truss. 15c each; \$1.50 dozen.

YELLOW KING HUMBERT—Four feet. Foliage of very deep dark green with flowers measuring from 5 to 7 inches across, individual petals 3 to 3½ inches in diameter. Color of flowers a deep rich yellow heavily spotted and blotched with bright red. 10c each; \$1.00 dozen.

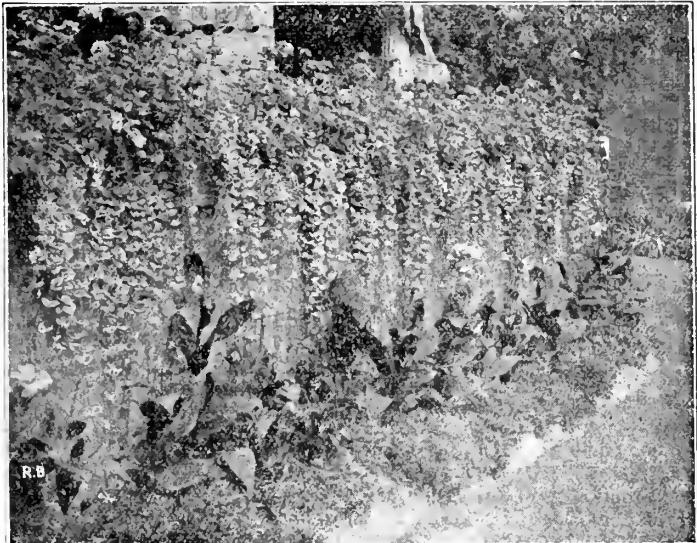
RICHARD WALLACE—4 feet. Popular large canary yellow. 15c each; \$1.50 dozen.

METEOR—Five feet. Deep, rich, dark red color. Green foliage, excellent for bedding. 10c each; \$1.00 dozen; \$7.50 per 100.

KING OF BRONZES—Six-seven feet. Foliage canna, with rich red bronze leaves rounded at end; very gorgeous and striking. 10c each; 75c per dozen; \$4.00 per 100.

ASSORTED UNKNOWN VARIETIES—Often tubers get mixed up, and we will sell you these canna tubers at a very low price. 50c per dozen; \$3.00 per 100.

For parcel post add 2c per bulb, or 15c per dozen.



A Pleasing Effect with Cannas

PEONIES

A good, rich, deep soil and an open sunny position, and a liberal supply of water during the growing season being sufficient to give an abundance of flowers, which rival the finest roses in coloring and fragrance and once planted they take care of themselves, increasing in beauty each year. Never cover more than two inches.

DUCHESS DE ORLEANS. Very tall. Medium to large flowers, deep pink. 50c each.

EDULIS SUPERBA. Deep rose pink, crown type. Very early and fragrant. Tall. 65c each.

FELIX CROUSSE. Large, rich, ruby red. Very fragrant, blooms freely. 85c each.

FESTIVA MAXIMA. Very large white flecked carmine. Early and fragrant. Tall. 65c each.

DUKE OF WELLINGTON. Very large, pure white. Vigorous, long stems, fragrant, 50c each.

UN-NAMED SORTS

DOUBLE WHITE. Each 35c. Dozen \$3.75.

DOUBLE PINK. Each 35c. Dozen \$3.75.

DOUBLE RED. Each 50c. Dozen \$5.25.

Add 6c each or 50c per dozen for Postage.

TUBEROSES

Easily recognized by its exquisite fragrance and beautiful flower spikes, which are borne on long stems, making it an admirable cut flower for house decoration.

MEXICAN EVERBLOOMING—They have tall, stiff stems, flowers pure white, single, delightfully fragrant. They never blight and the smallest bulb blooms the first season. 10c each; dozen, 60c; 100 for \$4.00. Add 10c dozen for postage.

DOUBLE PEARL. For flowering in the open ground, plant during April and May or as soon as ground is warm. 10c each; dozen \$1.00. Add 10c dozen for postage.

ANNUAL VINES

CINNAMON VINE—Quick grower with beautiful glossy heart-shaped leaves and sweet-scented flowers. Vines will run 25 to 35 feet in one season. Large roots. 15c each; \$1.25 dozen.

MADEIRA VINE—Is noted for its leaves, which are small, dark-green and very dense. It will succeed in any location, making best growth in a sunny sheltered place. 10c each; 75c dozen. Add 10c dozen for postage.

GLADIOLI

THE queen of summer flowering bulbs and prized for cut flowers. Gladioli serve as the best cut flowers for the summer season in the middle west. The flower stalks come up from the bulb and consequently are not so dependent in getting roots well established before hot weather comes as annuals. For cutting it is best to cut the spikes as soon as the two lower flowers are open, the rest will open in the house. Remove the faded flowers, cut a little off the stem and change the water every day. Each spike will usually bloom for a week or more in this way and be a real delight to the household.

Plant the bulbs in furrows, 5 inches deep, cover 2 inches deep and 5 to 6 inches apart.

ALBANIA—Almost pure white, large open flowers. 50c per dozen; \$3.50 per 100.

ALICE TIPLADY—(Prim.) Orange-Saffron. 60c per dozen; \$4.00 per 100.

AMERICA—Exquisite pink. 50c per dozen; \$3.00 per 100.

BARON J. HULOT—Dark rich velvety purple. 10c each; \$1.00 per dozen; \$7.00 per 100.

BUTTER BOY—Bright cream-salmon, with stripe of scarlet. 60c per dozen; \$4.00 per 100.

CHATEAU THIERRY—Bright scarlet-red, with carmine stripe on creamy ground on lower petals. 80c per dozen; \$5.50 per 100.

E. J. SHAYLOR—Large ruffled rose-pink blooms. Each 7c; dozen 60c; 100 for \$4.25.

HALLEY—Salmon pink, blotched, with the bright red stripe through the center, producing a superb effect. 50c per dozen; \$3.50 per 100.

HERADA—Pure mauve, glistening and clear with deeper marking in throat. 60c per dozen; \$4.00 per 100.

JOE COLEMAN—Large rich red. 80c per dozen; \$5.50 per 100.

LATINA—Bright rose-pink, large wide open flowers. 60c per dozen; \$4.00 per 100.

LOS ANGELES—Shrimp pink with orange-carmine throat. Each 15c; dozen \$1.50; \$10.00 per 100.

MRS. FRANCES KING—Brilliant vermillion scarlet. 60c per dozen; \$4.00 per 100.

MRS. FRANK PENDLETON—Flushed salmon pink with rich maroon blotch on three lower petals. 75c per dozen; \$5.00 per 100.

PANAMA—Deep pink color, flowers of large size and good form. 7c each; 50c per dozen; \$3.50 per 100.

PEACE—White with pale violet markings on lower petals. 80c per dozen; \$5.50 per 100.

SCHWABEN—Clear canary yellow shading to soft sulphur. 80c per dozen; \$5.50 per 100.

FINEST MIXTURE—40c per dozen; \$2.75 per 100.



Vase of Mixed Gladioli

VIRGINIA—Brilliant scarlet crimson. Six or more massive blossoms open at one time Throat a little deeper. 80c per dozen; \$5.50 per 100.

Six of a kind at the dozen rate; 25 at the 100 rate. Postage paid on single bulbs. For a dozen or more add 10c per dozen or 25c per 100 for postage.

DAHLIAS

THE large showy blossoms are found in nearly every well planned garden and are the most gorgeous flowers in bloom during the fall. Dahlias are not hard to raise if proper care is given. When planting set them flat in holes five or six inches deep, but do not cover with more than one inch of soil; fill in the rest after the plants have started. Tie the plants to stakes as soon as they are a foot high and if they receive plenty of moisture they will bloom profusely. Dahlias are very tender and should not be set out until danger of freezing weather is past. The bulbs must be harvested before the ground freezes in the fall. Our dahlias are grown for us by one of Colorado's leading dahlia specialists.

STANDARD CACTUS DAHLIAS

COUNTESS OF LONSDALE—Three feet. Freest flowering cactus dahlia of a rich salmon color with a tinge of apricot at base of petals. Perfect form. 40c each.

CHARLES CLAYTON—Four feet. Intense red flower, very vivid and of large size. Produces freely on long stems. 30c each.

GENESTA—Three feet. Rich, orange-bronze. 30c each.

MARION THOMPSON—Three feet. Pure lemon yellow. Flowers large on long stiff stems. Early. 30c each.

PERLE DE LYON—Three feet. A large pure white flower, borne on good stems. Each 30c.

STANDARD DECORATIVE DAHLIAS

MAID OF KENT—Four feet. Intense scarlet, variegated with pure white. 30c each.

MINA BURGLE—Four feet. Flowers extra large. Dark vivid red, produced on good stems. 30c each.

MOONBEAM—Three feet. Large flower of clear canary yellow color. Blossoms freely, borne on excellent stems. 30c each.

MRS. THOS. W. BURCH—Four feet. Rich old gold, sometimes marked with pink, shading to fawn. 35c each.

SYLVIA—Four feet. Soft pink with light center. Long stiff stems. A profuse bloomer, fine for cutting. 25c each.

SHOW AND FANCY DAHLIAS

A. D. LIVONI—Three feet. Rich, pink, finely formed. A very handsome flower. 25c each.

BON TON—Four feet. A fine ball-shaped flower of deep garnet red. An extra fine dahlia. 25c each.



Mina Burgle

GLORI DE LYON—Three feet. Pure white, the largest white show dahlia in cultivation, round as a ball. 25c each.

GOLDEN SPRAY—Four feet. Large bright, golden yellow flowers. Profuse bloomers, long stems. 30c each.

D. W. MOORE—Three feet. A flower of mammoth size, on long stiff stems. Color deep, velvety maroon. 25c each.

DUBAY SEMESAN BEL is recommended for disinfection of such flowering roots as dahlias, cannas, and iris. See Page 62.

SHRUBBERY

A fine assortment of shrubs. All of the best kinds. These bushes are all two years old, or more, well rooted and hardy. To make it possible to send them by parcel post we prune each bush just before packing it. It may appear that you are receiving smaller shrubs than you are accustomed to, but please remember that these were all large plants before being pruned. You can tell this from the thickness of the stem, and the roots. Shrubs should be vigorously pruned before being transplanted, so that we are simply doing what you should do, anyhow, before setting the shrub in the ground.

PLEASE NOTE

All plants, shrubs, roses, vines, bulbs and roots go by express at purchasers expense.

If you wish shipment to go by parcel post, please add 15c for one bush, and 5c for each additional bush ordered, to cover packing and postage.



SHRUBS

1½ to 2 feet high, except as noted 2 and 3 years old

ALTHEA—(Rose of Sharon)—A very ornamental shrub of symmetrical growth. Covered with large hollyhock-like flowers in latter part of summer. Pink, red, white, purple, and variegated. 40c each; 3 for \$1.10.

BUTTERFLY BUSH OR SUMMER LILAC—A most desirable bush bearing long spikes of small Lilac like flowers from July until cut by frost. It is the center for clouds of butterflies the whole summer. The top dies down each winter and the plant comes fresh again from the roots. 35c each; 3 for \$1.00.

DEUTZIA GRACILIS—A large flowered pure white, of dwarf habit. 40c each; 3 for \$1.10.

BUSH HONEYSUCKLE—One of the most shapely ornamental plants to be found. The pink or white blossoms are followed by shiny red berries. These come in two colors—pink and white. Please order by color. Extra strong plants, 40c each; 3 for \$1.10.

FORSYTHIA OR GOLDEN BELL—About when the crocuses are out this large well known shrub lights up the garden with its masses of bright yellow bell-shaped flowers before the leaves appear. 40c each; 3 for \$1.10.

GOLDEN ELDER—Vigorous shrub with brilliant yellow foliage. Very striking in any landscape. 40c each; 3 for \$1.10.

HYDRANGEA PANICULATA GRANDIFLORA—The best known and most popular shrub throughout the middle west. The flowers, which are borne in dense pyramidal panicles a foot long, are white when they first open, but gradually change to a rose color, and remain in good condition for a long time. We have some extra strong plants. 40c each; 3 for \$1.10.

BARBERRY RED LEAVED—(New)—This has proved to be the most popular of all new shrubs introduced in recent years. Similar to Japanese Barberry but the leaves are bright bronze-red in full sunlight. 12 to 15 inch shrubs. 40c each; 3 for \$1.10.

BARBERRY THUNBERGII—(Japanese Barberry)—This variety does not carry the cedar and wheat rust. Grows dense and round. Makes a good hedge. Bright red berries in winter.

PERSIAN PURPLE LILAC—(*Syringa Rothomagensis*)—A large upright shrub 10 feet high, with bright green heart-shaped leaves. The flowers are well known by everyone. Large field-grown plants. 40c each; 3 for \$1.10.

ROSES (Hybrid Teas)

The finest and most satisfactory type of Roses for the home plantings. Combines perpetual blooming with richness of coloring and exquisite beauty of form, and at the same time they are nearly as hardy, in most instances as the Hybrid Perpetuals. Give them protection with the approach of winter, prune back severely, supply plant food, and keep the blossoms picked. That is all that is necessary to produce a world of blooms.

(Suggestion)—The following assortment includes twelve of the very best everblooming varieties, both old and new.

COLUMBIA—Bright pink flowers of exquisite form; sweetly scented; free flowering.

ETOILE DE LYON—Golden yellow, very double, heavy flowers.

RADIANCE—Most popular rose in America. Large brilliant rose colored flowers. Very hardy and easy to grow.

SOUVENIR DE CLAUDIUS PERNET—(New)—Clear

Price of any of the Roses listed on this page excepting Talisman: Each 40c; 6 roses for \$2.10. Please note that these prices are for two-year, well-rooted, heavy stock.

MOCK ORANGE (*Philadelphus Coronarius* or *Syringa*)

—A hardy shrub with tall, upright over-arching branches. The leaves are bright green; the deliciously fragrant creamy-white flowers are borne late in the spring. 40c each.

SNOWBALL (*Viburnum*)—One of the choicest hardy shrubs, with healthy dark foliage, and large balls of pure white flowers, borne in great profusion in May. Extra large plants. 40c each; 3 for \$1.10.

SNOWBERRY—Small pink flowers in early summer, followed by large clusters of waxy-white berries. Attractive foliage. 35c each; 3 for \$1.00.

TAMARIX—A beautiful shrub with small leaves, the flowers are pink and delicate, borne on long spikes. Blooms in May. 40c each; 3 for \$1.10.

SPIREA ANTHONY WATERER—Low growing, semi-dwarf shrub with light red flowers. Blooms all summer. A popular favorite. 15 to 18 inch shrubs. 40c each; 3 for \$1.10.

SPIRAEA VAN HOUTTEI—This medium tall graceful bush is an ornament to any yard all season long, and when, late in the spring, it blossoms, the white flowers make it look like a fountain. Every Middle West gardener should be able to enjoy this delightful shrub in his own grounds. Extra large two-year plants. 35c each, 3 for \$1.00.

PRIVET HEDGING

AMOOR RIVER PRIVET—This is very similar to the well known California Privet, but is much more valuable here as it is much more hardy. It can be easily trimmed, and makes a very neat border for the yard. Strong, well grown plants 12 to 18 inches tall. \$1.00 per dozen; \$6.00 per hundred. By express only at these prices.

AMUR RIVER NORTH—(As in your list)—12-18 inch, per doz. \$1.00; per 100, \$6.00.

IBOLIUM—(New)—A cross between California and Ibota privets. Has the beautiful glossy green foliage of the California privet but is much harder. Recommended for Kansas in place of California privet. Per doz. \$1.25; per 100, \$9.00.

WEIGELA ROSEA—A very beautiful shrub of vigorous growth. Bears a profusion of large, deep pink, trumpet-shaped flowers in early summer. 40c each; 3 for \$1.10.

SPECIAL OFFER

Any 10 of the shrubs listed above at 40c each for \$3.50
Any 10 of the shrubs listed above at 35c each for \$3.00

yellow flowered. Blooms freely all season. Disease resistant foliage.

TALISMAN—(New)—Most popular of recent introductions. Brilliant yellow and orange red buds open to golden yellow stained red and rose inside. A magnificently colored flower. 50c each.

MRS. CHARLES BELL—(Shell Pink Radiance)—Considered by some the most beautiful of the Radiance family; pearly pink.

MME. CAROLINE TESTOUT—Glistening frosty pink; vigorous growers; free bloomer.

ROSES (Hybrid Teas) Cont.

GRUSS AN TEPLITZ—Dark rich crimson, passing to fiery red. Strong and vigorous.

KAISERIN AUGUSTA VICTORIA—Soft pearly white, faintly tinged with lemon in the center.

RED RADIANCE—A fine rich red which does not dull with age. Healthy growth, delicate fragrance.

LADY HILLINGDON—A beautiful coppery shade of apricot-yellow. Vigorous and a strong grower.

LOS ANGELES—Luminous flame-pink, toned with coral and shaded with translucent pink at base of petals. Richly fragrant.

PRICES—Any of the roses listed under Hybrid Teas and Hybrid Perpetuals: 40c each; 6 for \$2.10; 12 for \$4.00.

ROSES (Hybrid Perpetuals)

The most beautiful and hardy of all roses. They require the least protection over winter, and bloom regularly year after year. Despite the name, this type is not as continuous in blooming as the Teas or Hybrid Teas.

AMERICAN BEAUTY—Deep pink, approaching crimson, beautiful form and rich fragrance.

FRAU KARL DRUSCHKI (Snow Queen)—Pure paper white. Vigorous growth and heavy foliage. Perfectly formed blooms on fine long stems.

PAUL NEYRON—A clear pink. Said to be the largest Rose in cultivation, often measuring five to six inches across.

ULRICH BRUNNER—Brilliant cherry-red. A very strong grower, and an exceptionally heavy bloomer.



HARDY CLIMBING ROSES

Price of Climbing Roses: 40c each, 3 for \$1.10; by express; if wanted by mail, see note, page 33.

PERFECTLY hardy, requiring no winter protection. A severe pruning in July will induce more vigorous growth, and an abundance of flowers. Grow them over porches, arbors, arches, clothes posts, fences or old tree stumps. Every yard has at least one place for Climbing Roses.

BESS LOVETT—Large tea-rose flowers of light crimson-red. Long stems suitable for cutting; sweetly fragrant.

PRICES—(Same as for all other roses.)

CLIMBING AMERICAN BEAUTY—Rich red, fragrant, vigorous in growth, prolific bloomer, having hundreds of perfect flowers open at one time.

DR. W. VAN FLEET—Of perfect form, color a remarkable delicate shade of flesh pink, deepening to rose in the center, delicately fragrant.

PAULS SCARLET CLIMBER—Brilliant, vivid scarlet, will not burn nor bleach until the petals fall. Plants are literally covered with flowers.

HARDY VINES

ALL vines should be deeply planted in a well prepared hole, at least one foot square and two feet deep, and good rich soil filled in when the plant is placed. Water thoroughly. Evergreen vines prefer shady places; deciduous vines, sunny positions.

BOSTON IVY OR AMPELOPSIS VEITCHI—An attractive hardy climber remarkably well adapted for covering walls, as it clings to the smoothest surface. The growth is very rapid, and after the first year it is absolutely hardy in the middle west. Foliage deep green, changing to a bright crimson in the fall. After the leaves have fallen the attractive red berries hang on during most of the winter. Extra strong, two-year plants. 45c each.

CLEMATIS JACKMANII—The finest of the large flowering Clematis. The violet purple flowers are four to six inches across, and bloom during June and July. 90c each.

CLEMATIS PANICULATA—The best vine known for covering trellises, arbors or anything that will give it support. The vine grows rapidly and quickly forms a dense mass of dark, glossy leaves. The fragrant small white

flowers are produced in clouds during September, when very few other vines are blossoming. 35c each.

HALLS JAPAN HONEYSUCKLE—Strong, vigorous vine with pure white flower, changing to yellow. Foliage remains green well into autumn. Very fragrant. 35c each.

SILVER LACE VINE—(New)—Also called China Fleece Vine. One of the most rapid growing vines in cultivation. Grows twenty feet or more in one season. Covered with clouds of white flowers in late summer. Highly desirable. 65c each.

EVERGREEN BITTERSWEET—The leaves stay on the year 'round. They turn a rich bronze red in winter. Older plants have pink berries with red seeds. Will cling to stone, brick, or stucco. 40c each.

HONEYSUCKLE HECKROTTI—A sensational vine! The very best ever-blooming vine. Flowers red outside, yellow inside. In bloom constantly from spring until killing frost. Very hardy. 75c each.

PURPLE WISTERIA—An old-fashioned favorite. Large pendulous clusters of lavender flowers in early summer. 35c each.

HARDY PERENNIAL FLOWERS

A SPLENDID assortment of Perennials well adapted to this climate. For quick and easy results set out a bed of Perennials. To keep down the costs we handle these plants only in mixed colors. Where colors are mentioned in the descriptions, it is merely to indicate the range. These plants are all well grown, well rooted, hardy stock. Ready for shipment March 1st to April 15th. May be set out in the fall during October and November.

If you wish these plants sent by parcel post, please add 5c each, or 25c per dozen to cover postage, and the added packing costs.

COLUMBINE (Aquilegia)—The range of colors of this graceful plant is not exceeded by any other in the list. Mixed colors.

COREOPSIS LANCEOLATA GRANDIFLORA—Eighteen inches. Flowers rich golden-yellow. Graceful of form. Valuable for cuttings.

GAILLARDIA—Two feet. Flowers are of gorgeous colors, petals are marked with rings of crimson, orange and vermillion, with a center of dark red brown. Good for cutting. Flowers from June until killing frost.

HOLLYHOCK—Invaluable for planting in rows, or for interspersing amongst shrubbery. Should have good, rich soil and slight protection during the winter. Double white, red, pink and yellow.

IRIS GERMANICA OR FLAGS—This well-known flower is the delight of the gardener very early in the spring, before the rest of nature is awake. 10c each, \$1.00 dozen.

IRIS KAEMPFERI (Japanese Iris)—Much more delicate than the Germanica. They bloom about the middle of June, and for two or three weeks after, a time when such plants are particularly welcome. They should have rich soil and plenty of water. 30c each, \$2.50 dozen.

HARDY LARKSPUR (Delphinium)—The tall spikes of blue flowers of many attractive shades make this one of the most popular flowers in the Middle West.

HARDY PHLOX—Twelve inches. Phlox are among the most important of the Perennial class. Beacon, bright cherry red.

MRS. JENKINS—The best pure white.

R. P. STRUTHERS—Bright rosy, carmine, with claret red eye.

Rheinlander, salmon pink, large flowers.

La Vague, mauve, red eye.

Rijnstroom, large, deep rose-pink.

Von Hochberg (New), brilliant red.

Prices: Any perennials listed here (unless otherwise priced) 25c each; 5 for \$1.00; 12 for \$2.00.

HARDY GARDEN PINKS—Twelve inches. Old garden favorites, bearing sweet scented, double flowers in profusion, May to July. Valuable for edge or hardy border and for cutting.

SHASTA DAISY—Alaska, 18 inches. Pure white blooms, 3½ to five inches across. Flowers summer and fall. 25c each, \$2.25 dozen.

SWEET WILLIAM—Free flowering, hardy. Flower in early summer. Their rich and varied colors make an attractive effect in beds and border.

AGERATUM—Hardy (Mistflower) Grows about one foot high in a dense clump. Has attractive crinkly leaves and is covered with clear blue flowers in late autumn. Very striking.

GYPSOPHILA—(Baby's Breath)—Produces large masses of delicate white flowers in midsummer. Fine for drying for winter use.

HARDY SWEET PEAS—More vigorous than the annuals. Make attractive vines that stay green late in the fall. Pink, red, white.

HARDY SWEET VIOLETS—Russian strain. Flowers are large, dark blue, and fragrant.

ANNUAL FLOWERS

The bright, showy flowers of the garden are all furnished by the Annuals. We are offering a few of the sorts that many of our customers prefer to raise from well started plants, rather than from seed. These plants are all grown in flats, have been transplanted, and are consequently hardy and well rooted. Ready for shipment April 15th to May 15th.

For parcel post shipments, please add 10c per dozen, or 25c per 100 to cover postage and packing.

	Dozen	Hundred
ASTERS, late branching, mixed	\$0.25	\$1.50
CALENDULA, mixed colors	.25	1.50
PANSIES, grown from our own splendid mixture	.50	3.00
PETUNIA, single dwarf, mixed	.25	1.50
SALVIA, Bonfire and Splendens	.45	3.00
SNAPDRAGON, either tall or dwarf mixed	.25	1.50
PHLOX, Drummondii, mixed colors	.25	1.50
SWEET WILLIAM, mixed colors	.25	1.50
VERBENA, single mixed	.35	2.25
VINCA, or PERIWINKLE. Strong upright plants	.35	2.25
ZINNIA. Giants, mixed colors	.25	1.50

FRUIT TREES

In the Following Section, We Have Included the Varieties Which We Consider Best for the Territory We Serve.

APPLES

	Each	Per 10
Coopers Early, yellow, summer		
Delicious, red, winter		
Early Harvest, yellow, summer		
Grimes Golden, yellow, winter		
Jonathan, red, winter	4-6 ft.	\$.40
Stayman, red, winter	3-4 ft.	.30
Wealthy, red, fall		
Winter Banana, yellow, winter		
Red June, red, summer		

PEACHES

	Each	Per 10
Champion, white freestone, midseason		
Elberta, yellow freestone, midseason		
J. H. Hale, yellow freestone, midseason		
Crawford Early, yellow free stone, early		
Mayflower, white cling, early	4-6 ft.	\$.40
	3-4 ft.	.30
		\$3.00
		2.25

PLUMS

Sapa, purple	4-6 ft.	\$.45	\$3.50
Opata, red		.35	
Hanska, red			
Wild Goose, red			
Abundance, red	3-4 ft.	.35	2.50
Burbank, red			
Shiro, yellow			

CHERRIES

Early Richmond	4-5 ft.	\$.45	\$3.50
Montmorency		.35	
Compass			

PEARS

Kieffer	4-5 ft.	\$.45	\$3.50
Duchess		.35	
Bartlett			
Seckel (Sugar pear)			

GRAPES

	Each	Per 10	Per 100
2-year Vines			
Concord, black	\$ 10	\$.80	\$ 5.00
Moores Early, black	.15	1.00	8.00
Niagara, white	.15	1.00	8.00
Catawba, red	.20	1.25	10.00

FIELD SEEDS



SWEET CLOVER is a crop that is hardy; defies wet and drouth; seldom winter kills, and will grow on land that will not produce Alfalfa. Many wet, waxy soils are being farmed unprofitably by other crops, that would produce a large crop of Sweet Clover, and furthermore Sweet Clover will turn that poor land into land that will, within four or five years, be nearly 100 per cent better for any other crop that the farmer wants to put there.

Sweet Clover has long, deep roots that permit water and air to penetrate to the lower levels of the soil and thus greatly aids the mechanical condition of the soil. As Sweet Clover is a legume it increases the nitrogen content of the soil. Wheat, Corn or Alfalfa grown on a field following Sweet Clover are greatly improved. Yields of 10, 15 and 25 per cent increase are not at all uncommon.

If you have a piece of upland or a few acres in the bend of a creek, sow Sweet Clover on it. Just disk the ground and harrow the seed in. Do not cover deeply. Sweet Clover still maintains its wild nature to the extent that it is capable of taking care of itself. Many good stands of Sweet Clover in the prairie parts of Kansas were sown in the grass without any cultivation whatever and have proved very profitable to the owner. If the field is to be grazed, stock can be allowed on it when the plants are six inches high. As the plants develop and grow strong, put more live stock in the field, a sufficient number to keep the plants closely clipped. Sweet Clover should be pastured

until late fall and again the next spring, the plants should be closely grazed until May 25th to June 10th, when live stock should be removed to other pastures and permit the plants to make a seed crop, which should be ready for harvest early in August. If a seed crop is not wanted continue to pasture until plants die. Sweet Clover is a biennial and not a perennial. That is, the plant grows only two years, then the roots die, so this plant must be given a chance to re-seed itself the second year.

For pasture sweet clover contains the same relative portion of protein as alfalfa. Cattle, sheep, hogs, and horses can be pastured on sweet clover. Unhulled sweet clover can be sown late in the winter, or very early in the spring months at the rate of 25 to 30 pounds unhulled seed to the acre. Hulled, scarified sweet clover seed should be sown at the rate of about 15 pounds to the acre.

OTHER CLOVERS

We have found that, in general, Alfalfa and Sweet Clover are the most profitable legumes for the Middle West and, consequently, we have not specialized in the other varieties of Clover, although each has its peculiar function to perform. We carry stocks of these, and are able to quote favorable prices, which will be named on request.

RED CLOVER—(also called Medium Clover)—Is most generally used in the Northern and Central States for a soiling crop, and also for hay crop. Most of the farmers using it plan on turning it under the second year, as a part of a rotation to improve the fertility of their land.

MAMMOTH CLOVER—(Sapling Clover)—Grows considerably larger than the Medium Red. Has larger root system. Gives larger hay crops, particularly on light, thin lands or poorer clay soils. It may be sown with Timothy or Red Top for mixed hay, as it ripens at about the same time as these.

ALSIKE OR SWEDISH CLOVER—Is, in our opinion, more valuable than either Red or Mammoth, and can be used to advantage in combination with such grass seeds as Orchard Grass, English Blue Grass, Red Top and Timothy for either pasture or hay. Alsike will thrive in the wettest of soils, as well as on more suitable lands, and is considerably harder than Red, and the hay is of much better quality. Sow 5 to 7 pounds per acre.

WHITE CLOVER—(Sometimes called Dutch Clover)—Is of value to the summer pastures and is used in most grass seed mixtures either for pasture or for lawns. It supplies nitrogen to the soil, increasing the fertility and also making the plant food more available for use of the grasses. See back cover page.

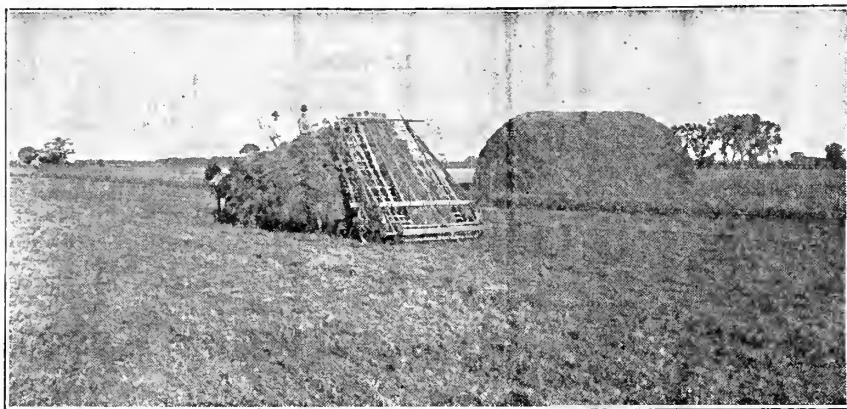
CRIMSON CLOVER—Is largely used in the Southern and Southeastern States to increase soil fertility. It has not been used to any considerable extent in the Middlewest. Is usually sown in August, September or October, in the South, at the rate of 15 to 20 pounds per acre. Inoculation should always be used on the seed before planting on account of favorable bacteria not being present in the soil.

JAPANESE CLOVER—(Lespedeza)—Is a summer, annual clover that begins its growth in the middle of the spring, but does not reach maturity until September or October. It has been successfully grown from the Mason and Dixon line to the Gulf. Sow in the spring after the ground warms up on freshly cultivated ground. Sow at least 20 pounds of the best recleaned seed per acre, roll the ground or cover seed lightly.

Nitragin treated clover seeds will show quick, vigorous growth

Write for Price Giving Quantity Wanted

ALFALFA



KANSAS certainly needs to sow more acres to Alfalfa and less to wheat. No other crop in a twenty-year average produces nearly as many dollars per acre as does alfalfa. It is almost impossible to raise hogs at a cost that will permit selling them on the market and make a profit for the grower unless he pastures young pigs on alfalfa. Poultry thrives on alfalfa, and it makes a very profitable addition to their feeding ration. It is not safe to pasture sheep, cows or other cattle on alfalfa because it has a tendency to bloat with the consequent loss of live stock. Alfalfa hay furnishes protein feed at less cost to the feeder. Cultivation of the soil is quite simple. It is better to plow shallow or disk carefully, harrow thoroughly and pack the ground so that only about one inch of surface soil is loosely tilled to hold moisture in subsoil for the use of the young plants. Alfalfa should never be covered more than three-fourths of an inch. The ground must be solid beneath the seed.

Alfalfa roots cease growing when they reach an air pocket in the ground, hence the necessity of packing the ground very carefully before seeding. Some localities complain they cannot secure good stands of Alfalfa. We believe that a large portion of acreage suitable for growing Alfalfa in Kansas needs liming in order to grow Alfalfa successfully. Information about liming can be had by writing the Department of Soils, Kansas State Agricultural College, Manhattan, Kansas.

"Common Alfalfa" seed is the variety that has always produced the best yields of high quality alfalfa hay in Kansas, Colorado, Utah and Oklahoma the past three decades. We sell Kansas Grown Common Alfalfa seed under our trade-mark "Acorn Brand Alfalfa Seed" and "Kansas Fancy Alfalfa Seed." We sell Oklahoma grown Common Alfalfa under the designation of "Oklahoma Fancy"—this seed is always grown in northern and northwestern Oklahoma and it gives good stands in Southern Kansas, Oklahoma, Arkansas and Texas. We also sell hardy Utah Common Alfalfa seed grown at an altitude of more than five thousand feet, where the soil and climatic conditions compel alfalfa to withstand sudden and extreme changes of temperature. The high grade Utah seed is sold under Beehive Brand Alfalfa, the trade-mark of the Associated Alfalfa Seed Growers of Utah.

Please name quantity wanted when writing for prices.

To insure quick vigorous growth of new plants inoculate the seeds with Nitragin before seeding.

Mung Beans

MUNG BEANS—Are drouth resistant and have made splendid crops of seed and forage where cow peas and soy beans had been completely killed by the blistering and withering heat of an extended summer's drouth. Mung Beans mature in about 90 days, and have produced uniformly larger tonnage of hay and forage as well as a large

yield of beans. Grows 4 to 6 feet tall and is one of the finest soil renovators. Requires about 4 pounds to the acre. Plant in rows 3½ feet apart and 2 to 4 inches apart in the row.

Please name quantity wanted when writing for prices.

Peanuts

CULTURE—Prepare the ground well, laying it off in rows with a shovel-plow; the rows should be 3½ feet apart, and put two kernels to the hill, which are about one foot apart. Cultivate thoroughly, and keep the land as level as possible. Three-fourths of a bushel of unshelled nuts will seed an acre.

MAMMOTH JUMBO—This variety grows to an astonishing size. The plants make compact bushes about 18 inches high, with heavy, erect stalks and large leaves. The giant nuts have thick, heavy-ribbed shells.

TENNESSEE RED—The finest variety grown. Especially adapted to the black waxy land, as well as the sandy soil. The nuts contain three large kernels in each pod, and are enormously productive.

SPANISH—In addition to their value for growing for nuts, these are very largely used in the South as a forage and fattening crop for hogs and other stock. They are early to mature, very productive, and in the far South, where they can be planted during March and April, two crops can be made in one year, the second crop being planted early in July, the tops making a hay crop and the nuts a grain crop. They grow more compact than the Virginia peanuts, making it possible to grow them closer, making cultivation easier also. This variety frequently yields 60 bushels of marketable peanuts and two tons of hay per acre.

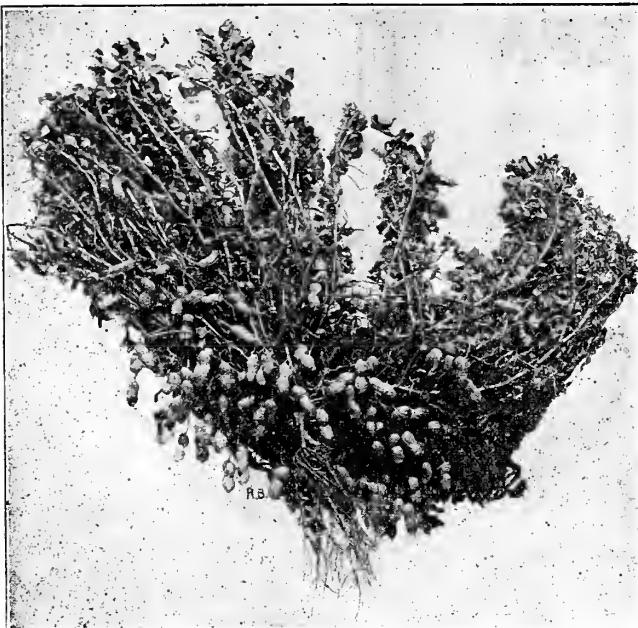
Please name quantity wanted when writing for prices.

Sand Vetch

SAND VETCH—(Also called Winter and Hairy Vetch)—Is a very valuable forage plant. It is a biennial, but resows itself and will come up again unless cut too closely. Sand Vetch is a legume, belonging to the pea family, but the vines are much longer and the forage more abundant. It is noted for its extreme hardiness. It remains green throughout the winter and is ready for pasturing earlier in the spring than any other crop. Drouth, heat and cold do not affect it. Sow 25 to 50 lbs. per acre according to quality of soil.

Please name quantity wanted when writing for prices.

Seeds of Alfalfa, Clover, Cow Peas, Soy Beans, Vetch, Peanuts, Garden Beans, Peas and Sweet Peas make one-half more root growth the first 45 days, when inoculated with NITRAGIN just before sowing.



A Plant of Jumbo Peanuts

Cow Peas

CULTURE—Make poor land rich, and rich land more productive. Cow peas are especially valuable as a "catch crop" for forage or hay and there are many million acres of land in the middle west that could be improved in productivity by sowing cow peas after wheat has been harvested. Cow Peas require from 70 to 90 days to mature a crop of peas, and if the crop is put in the last of June or the first half of July, after wheat harvest, there will be plenty of time to produce a good hay crop. The same land can be used for seeding wheat again in the fall months.

WHIPPOORWILL—A favorite early maturing variety of medium growth. The seed is reddish brown speckled.

NEW ERA—An early, upright growing variety and is five to ten days earlier than the Whippoorwill. Will not produce as much vine growth as Whippoorwill. The seed production is quite large compared to other varieties.

BLACK EYE—Vines will grow between 30 and 40 inches high, in other words it is of an average height with the different varieties of cow peas. Will produce more seed per acre than any other variety of cow peas and the peas are largely used in the south for table use as well as for stock. Will be ready to harvest in about 70 days.

Write for Price Giving Quantity Wanted

Soy Beans

SOY BEANS are very erect, growing with from two to six stems, branching out from the roots, and ranging from 16 to 42 inches tall, seldom falling down, except in extremely rich, loose soils. Soy Beans are drouth resistant, and will do comparatively well on thin lands, they give best results in a rather heavy, clayey soil. However, they respond very readily to moisture and rich lands. Planting should not be done until the weather and ground are warm. Soy Beans are especially valuable for planting with corn, or other row crops, and some of our good farmers report a larger yield of corn per acre when Soy Beans are grown on the same ground. It is quite necessary to inoculate the seeds of Soy Beans when they are first planted on ground to insure a good crop. It requires from 95 to 140 days for different varieties to mature, therefore it is important to select a variety that will mature in the growing season of your locality.

A. K.—Similar in appearance to the Manchu. Earlier and somewhat more productive, both in hay and seed.

EARLY WILSON—(100 days)—A flattened, black seed Soy Bean, maturing early, good hay producer, and perhaps, the largest yielder of seed. Quite popular in Kansas and some adjoining States.

LAREDO—Its value, when compared to other Soy Beans, is the fineness of its stems, its yield of hay, its medium early maturity, and its heavy yield of seed. The seed of the Laredo are very small and one bushel will plant 8 to 10 acres in 2½ feet rows.

MANCHU—(120 days)—Produces yellow seeds of good size. Heavy stalks and medium quality hay, good ensilage variety. Fairly large yields of seed.

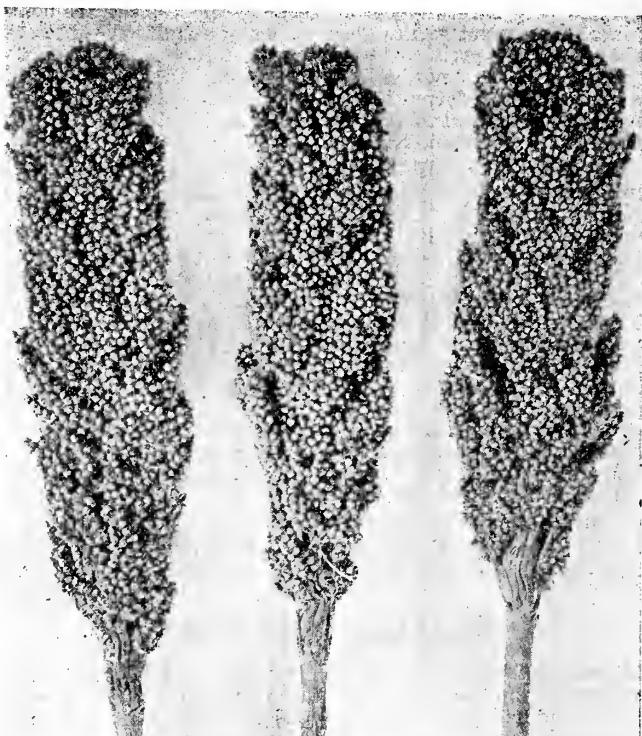
VIRGINIA—(95 days)—A brown seeded Soy Bean of quick maturity, and of medium growth, produces heavy seed crop. Desirable for the Mid-West.

Dwarf Essex Rape

Sow five to seven pounds per acre. With the exception of alfalfa, Dwarf Essex Rape is the most valuable forage plant that has ever been introduced in the United States. As a healthy fattening food it has no equal. It stands without a rival in point of cheapness and feeding qualities. It is an annual, bearing a close resemblance in leaf and stalk to the rutabaga, but both leaves and stalks are more numerous in the rape plant and of a taller habit of growth. Dwarf Essex rape thrives best on a good soil rich in vegetable matter. Slough lands are excellent. It is the simplest crop grown. It can be sown anywhere and everywhere and at all times after danger of frost has passed.

It may be sown in early spring to provide summer pasture for stock. Plow the ground same as for turnips, and sow 7 pounds per acre broadcast. It can be sown with corn at last plowing and makes a good summer pasture after corn is cut. Every farmer should sow enough for summer pasture and save his grass pasture for fall and winter. Special prices on large quantities.

Write for Price Giving Quantity Wanted



Kafir

Sudan Grass

SUDAN GRASS—The heaviest producing pasture crop known at this time. When Sudan is sown at the rate of 30 to 40 pounds to the acre it is possible to pasture many more head of live stock on an acre than if smaller quantity of seed is used. The ability of Sudan to throw off new plants instead of making second growth, like other sorghums do, makes for safety in pasturing live stock because prussic acid is not present in new plants. Sudan may be sown in the spring, as soon as frost danger is past, usually middle of May is an ideal time in this locality, and later planting may be done at intervals until middle of July. Sudan is a drouth resister. If wanted for hay crop Sudan should be out when ten per cent of blossoms appear, at that time the stems do not dry as quickly and quality of hay is much better. If wanted for seed crop it is preferable to drill from 5 to 7 pounds to acre in rows 3½ feet apart and cultivate two or three times, requires about 80 days from time of planting to seeding.

Write for Price Giving Quantity Wanted



A Field of Sudan

Broom Corn

BROOM CORN belongs to the same plant family as Cane, Kafir and Milo. It is divided in two groups, known as Standard and Dwarf. There are a good many names given to Broom Corn, which are used in localities where it is grown.

STANDARD—This variety grows from 7 to 12 feet high. It requires a different manner of gathering the heads. The tall stalks are broken or tabled at a height of about four to five feet from the ground and two rows are brought together in V-shaped form so that the heads protrude just beyond the outside row or "table" as it is generally called.

DWARF—This variety grows 3½ to 6 feet in height and the head is partly enclosed in the sheath boot of the upper leaf and it is more convenient to pull the heads than the "table" way.

Write for Price Giving Quantity Wanted

Kafir

CULTURE—The uplands of Kansas, Oklahoma and Texas will give much better cash returns when planted to Kafir, because Kafir when ground for feed gives practically the same feeding value as Corn. The fodder value of Kafir is much higher than corn fodder and it produces a larger tonnage per acre. It does not require very much Kafir to seed an acre when drilled in rows 3½ feet apart. Two to four pounds of seed to the acre is all you will need. If you want to sow the seed broadcast or drill it with a drill for fodder, use 50 to 75 pounds per acre.

DWARF BLACKHULL WHITE KAFIR—The most profitable Kafir for most middle-west soils. Matures in 100 to 120 days.

PINK HULL WHITE KAFIR—The earliest type of Kafir. Matures in 90 to 100 days. Very productive and especially valuable for upland farms by reason of early maturity.

RED KAFIR—Grows taller than the white; stalks slender, juicy and very leafy. The seed is red and smaller than the white and yields much heavier.

Write for Price Giving Quantity Wanted

Hegari

HEGARI—A new grain or forage crop similar to both White Kafir and Feterita. It is more desirable for grain than either, as the bad qualities of both have been eliminated. Feterita shells out pretty badly, and Hegari will

not shell. Feterita is soft and pithy, while Hegari is solid and sound and with plenty of blades. Its dwarf habit of growth, four to five feet in height, and compact heads of large white grains make it very attractive. Hegari also produces large crops of grain. The stems are rather sweet and horses and cattle eat the stalks, fodder and grain if permitted to do so.

Write for Price Giving Quantity Wanted

Milo

Wait until the ground is warm to plant Milo seed, usually about the middle of May is a favorable time.

DWARF CROOKNECK YELLOW MILO—Grows three to four feet high. Dwarf Milo is quite similar to the Standard Milo, but the heads all invariably bend over from the weight. It is not unusual for a head of Dwarf Milo to weigh one pound. The feeding value is the same as Kafir. This variety is more popular throughout the western plains of Kansas and Oklahoma.

DWARF STRAIGHT-YELLOW MILO—On account of its dwarf habit, it should be planted in rows 3½ feet apart and 12 to 14 inches apart in the row. Eighty-five per cent of the heads grow erect instead of crooking. The stalks range 3 to 4 feet high, the seed heads often weigh three-fourths of a pound when ripe. The grain shows same feeding value as Crookneck Milo.

DWARF WHITE MILO—Is a non-saccharine sorghum. Considering the ability of White Milo to throw out suckers from the main plant, each forming a heavy head, the rows should be at least 3½ feet apart and we would prefer to plant four feet apart. The plants should not be closer than one foot apart in the row, 18 inches would be better to insure a heavy grain yield. The plants grow from four to six feet high. The grain may be fed whole or ground. The kernels of White Milo are soft and furnish excellent feed for all kinds of animals and poultry. Two pounds of Milo is sufficient to plant an acre.

ATLAS SORGO—Its parents were Dwarf Black Hull Kafir (a non-saccharine sorghum) and Sourless Cane (a hybrid sweet sorghum) the result of this cross is a sturdy plant, combining a large production of fodder equal to, and in some cases superior, in quality to that of its sweet sorghum parent, and a heavy yield of grain equal in feeding value to Kafir. The seed is white of about the same size as Kafir. We recommend ATLAS SORGO to those in need of both forage and grain.

Write for Price Giving Quantity Wanted



Feterita

FETERITA—Grows six to eight feet high. The plant resembles Kafir but the stalks are much more slender. Feterita should be planted in rows three and one-half feet apart and the seed should be dropped from 14 to 18 inches apart in the row. When Feterita gets up about eight inches high, it branches out from four to ten sucker plants and each of these sucker plants grows up the same as the main plant. On account of this suckering habit of Feterita it should be planted thinner than Kafir or Milo. The first or main seed head ripens 15 to 30 days before the heads of the suckers are mature enough for grain. The grain is white like White Kafir and about twice the size. A splendid feed for poultry and other livestock. Feterita matures in about 80 to 90 days from date of planting. Feterita can be sown after wheat crop has been harvested, and in 80 to 85 days will turn out a yield of grain ranging from 15 to 40 bushels per acre, depending on the season. Feterita is a great drouth resister, and in this respect will withstand continued heat and drouth better than either Kafir or Milo. Especially valuable for filling silos.

Darso

DARSO is low growing, heavily foliated, and has a large stalk which is usually tinged with red. It is remarkable for its uniformity in height and uniformity in shape and color of heads. The stalks are sweet and juicy, and chemical analysis of grain shows that the composition is very similar to that of Kafir. Darso matures earlier than Kafir, which fact has much to do with its drouth resistance. At the Oklahoma Experiment Station, Darso has been used as a safe feed crop during years of severe and continued drouths. Darso makes excellent silage, and can be used for grain, forage or silage crop. Worms do not take the Darso in the field before harvesting as they do the other grain sorghums. Neither do chinch bugs damage Darso as they do Milo.

Write for Price Giving Quantity Wanted

Ross' Price List quotes quantity prices on all field seeds. Ask for it.

Sorghum or Cane for Forage

HONEY DRIP OR JAPANESE CANE—One hundred ten days. This variety of cane is without doubt the best all around cane. It is the very best syrup producer of all the varieties and is also a splendid forage crop for green feeding, making excellent hay if sown in drills very thick and may be planted any time between April and July. It grows from eight to 12 feet high and is very prolific. Matures about the middle of August to October—owing to time of planting, but will keep green and stand, if desired, until killed by frost, allowing the farmer to take his time to harvest for syrup. As a feed crop, it is the best the farmer can grow, on account of its immense amount of sugar. One great advantage over some other varieties is, if the season is too dry for more than one crop to be raised, this first growth will not mature and fall down, but will stand until frost, retaining its soft, nutritious qualities. It has a large, open head, with bright red seed. For syrup, sow 10 pounds per acre; for hay, sow 75 pounds to acre. No other crop will fill your silo so quickly, nor from as few acres.

BLACK AMBER—Ninety days, the old original early variety grown almost exclusively for forage crop either alone or broadcasted with cow peas. Fodder quality.

EARLY ORANGE—Matures a grain crop in 110 to 120 days. It is later than the Amber. Its stalks are heavier and shorter than the Amber. Its forage quality is first class. Is very valuable for ensilage. One of the heaviest producers of ensilage of the entire sorghum family.

KANSAS ORANGE—Probably five to 10 days later in maturing than early orange, more uniform in growth. Has the ability to stand storage out doors, retains its sweetness and palatability until late in the spring.

Write for Price Giving Quantity Wanted

RED TOP OR SUMAC—In our opinion this is the best variety for forage or dry hay. The stalks are much smaller than either of the Amber or Orange varieties. It requires 130 to 140 days to mature a seed crop. We do not recommend this variety for ensilage as strongly as we do the larger stalk varieties, but many of our customers say it makes very excellent ensilage. There is no better quality for forage than the Red Top. It will remain sweet and wholesome until late in May of the year following harvest.

SOURLESS CANE—(African Millet, or Light Orange Cane)—This variety of cane originated in Clark County, Kansas, some 25 years ago, resulting from the accidental hybridization of Orange Cane and White African Millet, (a type of sweet grain sorghum imported from South Africa), on account of the new type of cane showing as good feeding condition in the month of May the following year, as it did when first fed in the early winter months, the local name of Sourless Cane was given it by the ranchman. It has proven most popular among farmers, ranchmen and dairymen for use as dry feed and also for filling silos, until now, the sales in this territory, per year, equal that of all the other varieties of cane combined. This type of cane is largely used throughout Oklahoma and Southern Kansas under the name of African Millet, we do not know how this name originated, but never the less "a rose under any other name will smell as sweet" and wherever Sourless Cane, or African Millet, or Light Orange Cane, has been used it has given many people a chance to make more money and for this reason it is the most popular variety in the territory we serve.

PRUSSIC ACID POISONING—All kinds of Sorghums, grain and sweet, including Sudan and Johnson Grasses, are liable to be poisonous in the green stage when their growth has been checked by any cause, such as frost or drouth, or after second crop has started growth. The acid seems to disappear, however, after the hay is fully cured. The grain itself is never poisonous.

DURBAY CERESAN—A dust disinfectant, useful to control Sorghum Smuts. See Page 62.

Kansas Grown Seed Corn—Acorn Brand



Reid's Yellow Dent

White Varieties

BRAZILIAN FLOUR CORN—This corn stools like wheat, each kernel producing from five to eight stalks, each stalk bearing one to three ears, five to seven inches in circumference, nine to 12 inches in length, color beautiful white. It is the best variety for ensilage we know of, and yields to the acre more fodder and shelled corn than common corn. It contains a much larger quantity of starch than any other corn. Also used largely for roasting ears. Plant two kernels to the hill, thin to one, and cultivate like other corn. Three pounds will plant one acre.

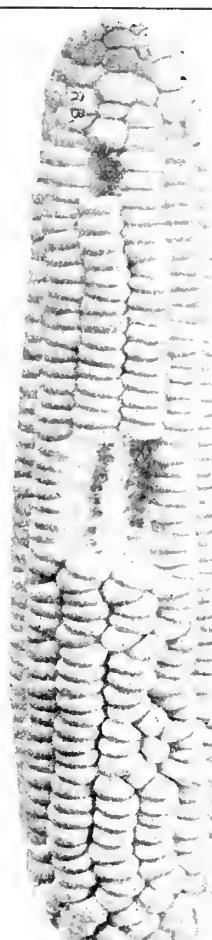
HICKORY KING—(90 Days)—An early eight-rowed white corn. The cob is so small and the grains are so large that when an ear is broken in half, one grain will nearly cover the entire end of the cob. Nearly all of the stalks bear two ears, and we consider it one of the best white corns. It matures fully in 90 to 100 days from time of planting.

BOONE COUNTY WHITE—(105 Days)—The stalks grow from 10 to 12 feet high with an abundance of foliage; ears measure 10 to 12 inches long, containing 16 to 24 rows of pearly white kernels, moderately smooth, solid

CORN—Is again King of grain crops. No other grain crop has the money making ability which corn possesses. Corn is the most important grain crop for the farmer with live stock. Corn growing is not easy because it needs careful selection of fields capable of producing large acre yields, proper planting at correct date to enable it to tassel and silk at a time when hot weather will not injure the fertilizing to insure well filled ears, thorough cultivation, and intelligent care to mature a profitable crop. Corn cannot be grown on the same land year after year, and return a profit, unless a plan is worked out to maintain and renew the soil elements required by corn to the point of the soil being always ready for corn. This can be done by planting corn in rows 7 feet apart and at a later date plant Soy Beans or Cow Peas in the blank rows, each year the corn should be planted in soil occupied by the legume crop the previous year. Strange as it may sound, the quantity of corn harvested from 7 feet rows will total about the same quantity in 3 years as the same kind of soil will turn out when planted to corn each year in rows $3\frac{1}{2}$ feet apart. Another good plan to follow in order to keep land in good condition is corn, oats, and clover, the latter either turned under for green fertilizer or permitted to make a seed crop for cash crop, this is called a three-year rotation. All three are good crops to grow, either to use on the farm or for market.

The seed corn we sell is grown within 50 miles of Wichita and is acclimated to this section of the country.

EARLY 8-ROW YELLOW DENT Corn is the one variety of corn which we feel every farmer should plant, if not his entire acreage at least one-third of it to this variety. We believe this is the best variety of corn we have ever introduced to our customers. It may be planted in this part of the U. S. at any time beginning about March 25th, and finishing about July 15th, depending on moisture available in the soil, with the fullest confidence in harvesting a crop of corn ranging from 20 bushels to 45 bushels per acre, depending on the growing season and also upon the soil condition. In other words 8-Row Yellow Dent corn makes a crop every year, the yield depending upon the season. 8-Row Yellow Dent will do well on heavy bottom land, sandy land, and also on upland. See description on page 42.



Brazilian Flour Corn

Dubay Semesan Jr. Corn Disinfectant

Semesan Jr. should be applied only as a dust disinfectant at the rate of 3 ounces to each bushel of seed corn. A level tablespoon of Semesan Jr. weighs about one-third oz. and will treat about 7 lbs. of seeds. Do not try to dissolve Semesan Jr. in water and use it as a liquid disinfectant. Always keep it thoroughly dry. Prices for Semesan Jr.: 4 oz. tin, 50c; 1 lb. tin, \$1.75; 5 lb. tin, \$8.00; 25 lb. tin, \$31.25. See Page 62.

and with a large germ. Cob white and medium size. Matures in 100 to 110 days.

COMMERCIAL WHITE—(110 Days)—Ears range from 8 to 11 inches in length. Cob of medium size, white in color. The kernels of almost pure white are large and of the smooth type, preferred by most farmers. Stalks range from nine to 11 feet tall of good form, and with plenty of foliage. One of the best white corns for this section of the United States.

MEXICAN JUNE CORN—(100 Days)—The stalks grow from nine to 15 feet high, considerable foliage on the upper half of stalk, which is very stocky to the height of the ears, which usually are set four feet below the tassel; fully two-thirds of the stalks will produce two ears each. The ears range six to 10 inches in length, seven to eight inches in circumference, with deep, thick, white kernels, closely set on small white cob. No other variety of corn has the drought resisting ability of our Mexican June Corn. Of strong growth, it sends its roots deeply into the soil, enabling it to withstand drought and hot summer winds better than any other sort. Give best crops when planted late in this section, preferably after June 5th.

Write for Price Giving Quantity Wanted

PRIDE OF SALINE—(120 Days)—This is the preferred variety of white corn for heavy, rich bottom lands. Under favorable conditions for growth Pride of Saline will return the heaviest yield of any white variety we list, but on second bottoms and on uplands we would not recommend it so highly, it needs moisture to mature its crop. Ears nine to 12 inches in length, with 16 to 24 rows of good size white kernels well set on a white cob, large enough to carry the load. Shank heavy. Stalk of heavy type with goodly supply of foliage.

Yellow Dent Varieties

EARLY 8 ROW YELLOW—(85 Days)—This extremely early yellow corn is the best early corn for hogging down. Also will sell readily on the market for roasting ears, when in the milk stage of growth. Ears range seven to 10 inches long, carry eight rows of large size, deep, thick, yellow kernels, well set on a red cob, so small one would doubt its ability to carry the grain, it is even smaller than the cob of Hickory King. Always makes a crop, ranging from 20 to 35 bushels per acre. Stalks seven to nine feet tall with plenty of blades. We recommend this variety, as the most desirable Yellow Corn for general use in this section and we believe it will prove profitable to everyone planting it.

MIDLAND YELLOW DENT (110 day)—Is a favorite variety in central Kansas. Stalk grows 8 to 10 feet high, of medium size, and is leafy. Ears 9 to 11 inches in length and from 7 to 8 inches in circumference, well filled with blocky yellow kernels, thick and deep. Shells a large percentage of marketable grain.

REID'S YELLOW DENT—(100 Days)—The stalk is medium in size, seven to nine feet in height and medium leafy. The ears range nine to 11 inches in length, and from 7½ to eight inches in circumference, kernels almost pure yellow color, thick and deep. This variety matures a very high per cent of good marketable corn in the field, and having a small shank is easily husked.

KANSAS SUNFLOWER—(110 Days)—This is the most uniformly large eared, medium early yellow corn we know of, ears averaging 10 inches in length and about two inches in diameter, weighing one pound and upwards. The ears are uniform in size and shape, and of a fine golden yellow color. Stalks grow about eight feet high, sturdy and very leafy, and supply large quantity of fodder. We recommend it to anybody wanting a large early yellow corn.

IMPROVED YELLOW DENT—(115 Days)—This is a local variety of yellow corn, grown very near Wichita. It has been especially productive on bottom and second bottom lands the past four years, and we recommend it to any one wanting a heavy yielding, good quality corn. The stalks range seven to nine feet in height, with an abundant growth of foliage. The ears average 10 inches in length, with 12 to 22 rows of deep, wide and thick kernels, well set on a red cob.

Flint Corn

SQUAW CORN—(75 Days)—The well-known, old fashioned, Indian flint corn. One of the earliest maturing of the corn family, excellent for roasting ears, for early feed, for ensilage, and for hogging down. The ears range from 10 to 14 inches in length, well filled with rounded kernels, pure white in the milk stage, and blue, purple and white and very flinty when matured. Stalks about five feet tall, and usually produce two or more ears of good quality corn.

Write for Price Giving Quantity Wanted

Hybrid Dent Varieties

BLUE AND WHITE—(100 Days)—One of the most dependable varieties for growing on uplands and on thin soils. The farmers on the Western plains have been able to grow crops from this corn when other varieties failed to mature. The ears range from 7½ to 10 inches long and from seven to eight inches in circumference. Kernels are medium deep, thick and always well filled, and as indicated by the name are blue, purplish and white. The stalks range eight to 10 feet in height, heavy to the ear and lighter above with plenty of foliage.

BLOODY BUTCHER—(115 Days)—This late, large kernelled, dark-red corn has been a favorite with many farmers for a long time. Its large shank, borne on a heavy stalk is, almost, insurance of maturity. Ears average 10 inches in length, with deep, thick kernels well set in even rows on a large cob. Some people claim a big yield of grain must come from large cob corn, Bloody Butcher will suit them.

SPECKLED BEAUTY—(115 Days)—Most kernels are striped, red and yellow, some are solid colors, some yellow, some red. The ears range from nine to 11 inches long, with 14 to 20 rows of large kernels, the circumference about eight inches, with red cob of medium size, and with a large shank. The stalks are heavy, from nine to 11 feet high. The height and size of stalk insure a large ensilage or forage crop.

Useful Grain Crops

KANOTA OATS—Is a selected strain of Red Texas Oats. In Kansas the Kanota variety shows somewhat earlier maturity, better straw growth, and on most soils, heavier yield per acre. Therefore is in greater demand. Ask for prices.

RED TEXAS OATS—Until recently the most popular variety of Oats in this section of the country. Is rustproof, early, does well on thin soils. Sow two to three bushels per acre, according to type of soil. Ask for prices.

MANSURY BARLEY—Is an early six-rowed variety with strong, bright straw. Bearing long, well filled heads of plump grain, ripens medium early. To secure best yields sow two bushels to the acre. Ask for prices.

JAPANESE BUCKWHEAT—It is early and very productive, the kernels are larger than any other variety of Buckwheat, of a rich, dark-brown color. Sow one-half bushels to the acre.

SUNFLOWER MAMMOTH RUSSIAN—Produces very large heads filled with the large striped grains. Requires very little rain to insure a crop. Is good food for stock and is unequaled as a food for poultry. Plant when the ground has become warm at the rate of 22 pounds to the acre.

SEED RYE—Is one of the best crops to use for renewing rich garden soils, sown in August or September and turned under in April it seems to give the soil all the properties of new soil for growing vine crops of melons or cucumbers. Is also one of the best winter and early spring pasture crops, for this purpose it may be sown as late as the middle of October, at the rate of 1½ bushels per acre.

WINTER BARLEY—(Bearded)—Barley is much sought after for its splendid feeding qualities. Add to this demand, the ability of Winter Barley to produce early fall and winter pasture in extra large quantity, when compared with other grain winter pasture, and you will understand the cause of its wide popularity. Our stock of Winter Barley has been grown in Sedgewick County, Kansas, for the past 6 years without an instance of winter killing in this time. It may be sown at any time between September first and November first in this locality. Two bushels per acre. Price on request.

DUBAY CERESAN—A Dust Disinfectant for the seed treatment of wheat, oats, barley and other cereals, gives control of oat smuts, effective for controlling barleystripes and smut. We recommend Ceresan for the control of stem smut of rye. Ceresan is economical to use. For wheat and rye only 2 ounces of Ceresan are required for each bushel of seed. For oats and barley only 3 ounces of Ceresan per bushel of seed are needed. Prices: 8 oz. tin, 50c. Larger sizes and full information about Ceresan on Page 62.

GRASS SEEDS



SPECIAL DIRECTIONS ABOUT SOWING—Nearly all grass seeds are very small and will not come up satisfactorily unless put in properly, and again, most planters will not use enough seed to the acre. The soil should be thoroughly prepared by deep breaking and thorough harrowing until a smooth bed is made, and the ground should be settled thoroughly before sowing. After sowing the seed, very little covering should be given with a brush or harrow that will cover it lightly. If the weather is likely to be dry, the ground should be pressed over the seed, so as to bring the seed in close contact with the soil to hold the moisture until the seeds get a good start.

More interest is shown in tame grasses in the Middle West, with a consequent increasing demand. We are endeavoring to keep pace with the new business and are carrying in stock almost every variety of grass seed now being used in this territory, and can make prompt shipment of any order.

ORCHARD GRASS—A most valuable grass for pasture and hay lands. On account of its earliness is very valuable for permanent pastures, as it furnishes the first green bite in the spring, and the last in the fall, is quick to recover from pasturing. Gives rich pasture till late in the fall. It will stand the drouth. It is well suited for shady places, such as orchards and groves. Will grow on almost all kinds of land. Sow 18 to 22 pounds per acre.

ENGLISH BLUE GRASS—(Meadow Fescue)—We regard this as one of the most valuable grasses for the Mid-West for it adapts itself to different conditions of soil and climate, thriving luxuriantly in all parts of the United States and Canada. It produces a great amount of early and late pasture of good quality and yields heavily. Rarely freezes out or winter-kills. It grows well on wet or dry bottoms, hillsides and uplands, gravelly and loamy soils and on clays. Eighteen to 25 pounds of seed should be sown on an acre.

BROMUS INERMIS—(Brome Grass)—It forms a leafy compact turf and does well for pasture and hay. It makes hay of about the same quality as Timothy and yields well. It stands drouth the best of any of our tame grasses. It starts growth early in the spring and remains green a little longer than most of the others. Especially valuable on second bottom land and in draws. Desirable to sow as companion crop with Alfalfa where the land is to be pastured. Sow 22 to 30 pounds to the acre.

BERMUDA GRASS—Usually one thinks of this grass as being only fit for lawns, this is only half of the truth. The habit of Bermuda Grass is to set roots at each joint of the plant that touches the ground, thereby forming a complete sod. Furnishes excellent pasture. Is decidedly a summer grass, as it does not start off until ground is thoroughly warm in the spring, and turns to a buff color after killing frost in the fall.

We believe this grass will help solve the pasture question in the Southwest during the hot, dry summer months. Sow during April, May and June, 10 to 14 pounds to the acre.

KENTUCKY BLUE GRASS—An excellent pasture and lawn grass, making best growth on lime-stone lands, but also does well on heavy or clay soils. It is sensitive to heat, but not to cold weather, and on this account does best in the spring, fall or winter. Sow in the fall or spring at the rate of 35 to 50 pounds per acre for pasture, or 125 to 175 pounds to acre for lawns.

ITALIAN RYE GRASS—Valuable for sowing in the late summer and fall months. Grows rapidly and stands cold weather very well on account of its perennial habit. Also is useful in sowing in Bermuda Grass sod to keep the ground green throughout the winter. Sow 20 to 25 pounds per acre.

RED TOP—(Herd's Grass)—Suitable for meadow and pasture mixture. Adapts itself to any soil, but gives best results on moist, rich soils, where it grows 2 to 2½ feet high. Often sown with Timothy and Clover, and outlasts both. When sown alone for pasture use 15 pounds to the acre. In pasture mixtures, five to eight pounds, and for lawns 25 pounds per acre.

TIMOTHY—As a crop to cut for hay, Timothy is probably surpassed by no other grass now cultivated. If sown alone it requires 15 to 18 pounds per acre. It is usually sown with other grasses and clovers and from six to 10 pounds per acre is used in the mixture. Can be sown in either spring or fall.

Price of Grass Seeds fluctuate. Our Price List will give latest prices. We will be glad to send it to you on request.

MILLET

GERMAN MILLET—(Sometimes called Golden Millet)—Makes rank growth, generally three to four feet high, if cut early furnishes a good quality of hay, if permitted to mature seed crop and threshed, the straw is also of value as feed. Excellent for cleaning weedy lands, and leaving the ground in better condition for the following crop. Drouth resistant. Sow 20 to 35 pounds per acre.

SIBERIAN MILLET—One of the best hay varieties for general use in western states. Not so tall growth as German Millet, finer stalks and more leaves, grows about three feet high, matures in 40 to 45 days. Very useful in sowing to clean lands for following crops. Sow 25 to 35 pounds to acre.

HOG MILLET—(Sometimes called Broomcorn Millet)—This variety has large, light colored seeds and is largely used in mixed Bird Seeds, Poultry Feeds, etc. Heavy seed yielder, on account of the branching habit of the plant, the hay is not as good as that of Siberian or German varieties. Sow 30 to 40 pounds per acre for hay and 20 to 25 pounds to make seed crop.

Prices of Millet are entered on our Price List. We will gladly mail it upon request.

CERTIFIED SEEDS

For 48 years, since 1884, it has been our policy to furnish our customers the highest quality seeds. To be certain that we are doing this thing it is necessary for us to constantly keep in mind the necessity of maintaining the correct type of each plant, and when possible to do so, to improve the type.

For several years, The Kansas Seed Improvement Association has been working to the purpose of improving certain grain and forage plants and its efforts, in this direction, are resulting in more resistant types of plants, and large grain production per acre. This is, in our opinion, the most desirable result to be obtained—larger acre yield—fewer acres to cultivate to secure the same grain yield—more acres for Alfalfa, Sweet Clover and other forage crops. Then diversified farming, with larger net earnings per acre is the natural result.

We are offering in 1932 Certified Seeds grown by members of The Kansas Seed Improvement Association in the crop year of 1931. These seeds were produced from stock seed of certified origin, of improved habits, and of strong virility. The seeds which we are offering are all from these, very excellent, parent stocks, and by reason of the superior breeding the vitality and reproduction ability is such as to insure better crops for those buying and using these seeds. No doubt exists in the minds of the good farmers but that improved seeds represent the quickest methods of cutting down production costs.

The cost of these seeds is slightly higher than that of seeds not certified, but the ultimate cost after crop has been harvested should be less.

CERTIFIED SEED CORN

KANSAS SUNFLOWER—(110 days) We are old-fashioned enough to believe that Yellow Corn contains more food value for feeding purposes than white corn. Kansas Sunflower is of the best quality, and one of the largest acre yielders. Full description on page 42. Peck, \$1.10; bushel, \$3.75.

COMMERCIAL WHITE—(110 days). This is one of the varieties best suited to produce good yields of corn on second bottom, upland, and thin light soils. Full description on page 41.

PRIDE OF SALINE—(120 days) This is the favorite White Corn for planting on heavy, rich bottom land. In favorable seasons for growth and development, Pride of Saline will return the largest acre yield of any white variety we list, but on second bottoms and on uplands it does not show up so well. It needs plenty of moisture around its roots. Full description on page 42.

CERTIFIED OATS

KANOTA—This variety is especially valuable for Kansas and Oklahoma.

Should you wish large quantities of Certified Seeds, ask us for price on quantity wanted

Our stock of these certified seeds is, of necessity, limited, and after our present supply is exhausted, we will be unable to fill orders so as stated above, all orders are accepted subject to prior sale. See pages 35 to 43 for other Farm Seeds.

CERTIFIED KAFIR

DAWN—This extremely early variety of Kafir is being used more generally throughout Kansas. It is well regarded for late plantings.

DWARF BLACK HULL—This older, standard variety is more in demand for full season Kafir. 10 lbs., 75¢; 25 lbs., \$1.35; 100 lbs., \$4.00.

PINK HULL—Usually matures in 90 to 100 days. Very productive, valuable for upland farms.

CERTIFIED CANE SEED

SUMAC—The stalks are smaller than orange Cane and is leafy. Valuable as dry fodder.

ORANGE—Heavy producer of forage—good as dry fodder and excellent for ensilage.

F.O.B. Wichita, subject to prior sale.

HENDRYXTM BIRD CAGES
Since 1869

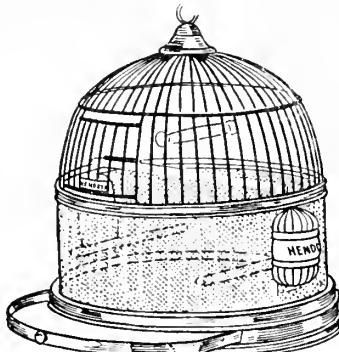


This cage, very substantial and strong, has invisible, removable pyralin seed guard and the character of strictly modern times. Equipped with 3 "Sanibranch" perches and "Sanitary" top cap. Non-breakable cups and drawer base.

Cage No. 2070DB—11" diameter.

Stand No. 5270.
Finishes—Brass and copper. Alternate black and brass.

Price
Complete \$13.75



Cage No. 2275DB
Price \$5.25



Like its name, "The Bower," this hand-some cage is a restful, comfortable and secure home for some lucky little canary. Equipped with 3 "Sanibranch" perches, "Sanitary" top cap, non-breakable cups and drawer base.

Cage No. 250DB—11" diameter.

Stand No. 63.
Finishes—Bayberry, green and brass; dull brass and black.

Price
Complete \$13.50

This strong, solid brass cage is equipped with drawer in base, three perches and swing. The top cap and non-breakable cups are black giving a very smart appearance.

No. 3775DB Cage with drawer base, non-breakable cups and wire seed guard. Diam. 11".

Finishes

Red and black trim.
Green and black trim.
Blue and gold trim.



A roomy new style solid brass cage with colored steel base and top. Non-breakable cups and drawer base. Diam. 11".

Finishes

Brass with green trim.
Brass with blue trim.
Brass with black trim.



A fine cage of Japanese Style 11" in diam. and equipped with drawer base and non-breakable cups.

Finishes

Ivory (green trim)
Duo Green
Duo Red
Duo Blue
Bayberry



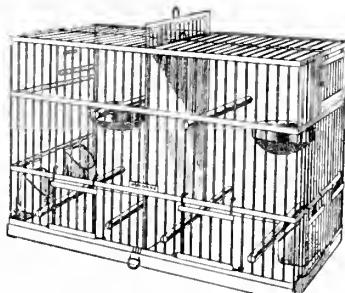
No. 4275LB Cage Ea. \$4.25
No. S4275 Stand Ea. 3.00

No. 2545DB Cage Ea. \$6.50
No. S2540 Stand Ea. 2.50

No. 2530DB Cage Ea. \$7.00
No. S2530 Stand Ea. 3.50

**BREEDING
CAGES**

These are very strong well finished with white and easy to clean. Fully equipped with 2 wire nests, cups, perches and removable partitions.

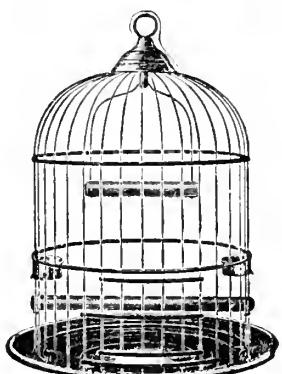


No. 86S 17½" x 8¾" x 11¾" High \$5.50 Ea.
No. 86 19½" x 10¼" x 12¾" High 6.50 Ea.
No. 87 22" x 11" x 14½" High 7.50 Ea.

**PARROT
CAGES**

Made of tinned wire with zinc base.

No. 75P—13" Dia. \$6.75 Ea.
No. 80P—14" Dia. 8.00 Ea.
No. 85P—15½" Dia. 9.60 Ea.
No. 90P—17¾" Dia. 11.00 Ea.



These parrot cages are strongly made by the famous "Hendryx" riveted construction.

BIRDS and SUPPLIES

St. Andreasberg Rollers — They are raised in the renowned town of St. Andreasberg, Germany, where the best canary breeders in the world are located. We handle only the highest grade. We guarantee each male bird to be a good singer.

We also carry a full stock of other Canary Birds at all times and guarantee all singers to be in full song. Any bird not satisfactory may be exchanged not later than 30 days after purchase. We guarantee safe arrival by express, charges collect. Please remit with order.



CANARIES

Imported St. Andreasburg Rollers, male	\$ 7.50 each
Imported St. Andreasburg Rollers, male, select	10.00 each
Imported St. Andreasburg Rollers, female	3.00 each
Imported German Choppers, male	10.00 to 12.50 each
Imported German Choppers, female	3.50 each
Imported Hartz Mountain, male	5.00 to 10.00 each
Hartz Mountain, female	1.50 each
Domestic, male	4.00 to 7.50 each

The select singers are those few chosen from each shipment for their unusual song.

Ross' Food and Remedies

These foods and remedies are especially prepared from formulas supplied by leading German bird breeders. Each ingredient is carefully tested, to be certain it is pure and sweet, before mixing is done. The demand for these has exceeded our fondest expectation, repeat orders come in regularly. Therefore we recommend them to meet the most exacting requirements of particular breeders. For postage add 5c per pkg.

Ross' Sure Song Bird Seed, per package	\$.25
Ross' Velvet Song Food	.25
Ross' Bird Tonic, per bottle	.25
Ross' Cod Liver Oil Nestling Food	.20
Ross, Health Food	.25
Ross' Lice Powder	.25
Ross' Moultting Food	.25
Ross' Mixed Bird Seed, in bulk, per pound	.20

ROSS MIXED BIRD SEED, in bulk, 9 lbs. for \$1.00, F.O.B.
Wichita

Other Foods and Remedies

Max Geisler's Roller, Seed, per package	Each
Max Geisler's Bird Grit	.25
Max Geisler's Song and Moultting Food	.25
Max Geisler's Maizena Biscuit	.15
Philadelphia Bird Bitters, per bottle	.25
French Bird Seed	.15
Sing Sing Bird Seed	.15
Kaempfer's Canary Highball	.15
Kaempfers, Big Kernel, Birdolene	.25
Spratt's Sing Song	.15
Spratt's Song Restorer	.25
Haller's Canary Pie	.15
Haller's Cage Wash, kills mites	.25

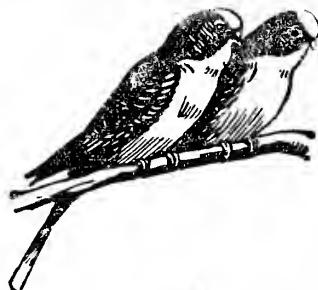
By Mail Add 5c per Package

Justrite Remedies

Roller Canary Seed	.25
Balm for Baldness	.25
Justrite Honey Roll	.15

By mail add 5c per package.

We have special prices on all seeds, remedies and foods for large users. Write for prices in quantities, advising the amount you wish to buy.



Australian Shell Paroquets

(Love Birds) This is the most popular and desirable variety for keeping in captivity. It is known throughout the world as the Budgerigar or Undulated Grass Paroquet. They are quite small birds. The tails are long and graceful, making the entire length of the bird from seven to nine inches. We offer them in three colors, the green shell and the all yellow, and the blue shell.

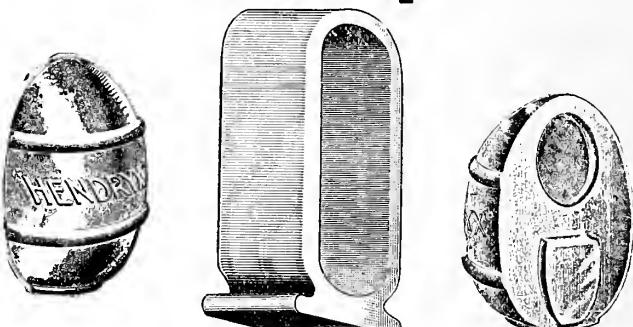
Ask for Prices

Mexican Double Yellow Head Parrots

The Mexican Double Yellow Head is the most desirable of all talking Parrots, and is, because of its ability to imitate clearly the human voice, commonly known as "the human talker." Place your order early; season begins in July and ends in October.

Ask for Prices

Feed Cups



Closed top, opal, or clear glass	\$.15 each
Open top, opal, or clear glass	.15 each
Non-breakable, closed top, duco	.25 each
Breeding Cage Cups, clear glass	.25 each
Closed top, glass, duco colors	.50 each
Bird Bath Dish, medium opal	.20 each
Bird Bath House, fits on cage, duco	.95 each
Treat Cup or Holder	.10 each
Egg Cup, opal	.15c each
Add for Postage	.03 each

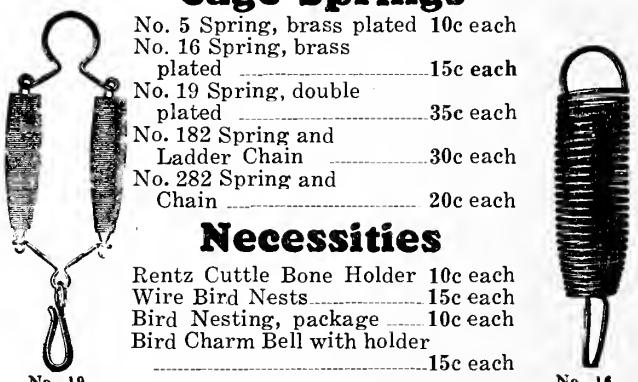
Wall Brackets



No. S, Nickel plated, 10"	\$.15 each
No. T, Brass plated, 10"	.15c each
No. Q, Nickel plated, 12"	.25 each
No. I, Brass plated, 12"	.25 each
No. KW, White enamel, 10"	.35 each

Cage Springs

No. 5 Spring, brass plated	10c each
No. 16 Spring, brass plated	15c each
No. 19 Spring, double plated	35c each
No. 182 Spring and Ladder Chain	30c each
No. 282 Spring and Chain	20c each



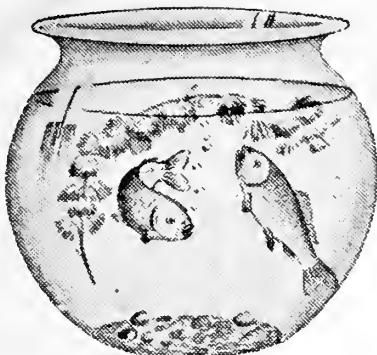
Necessities

Rentz Cuttle Bone Holder	10c each
Wire Bird Nests	15c each
Bird Nesting, package	10c each
Bird Charm Bell with holder	15c each



No. 16

GOLDFISH and SUPPLIES



We carry practically all the different kinds of goldfish in stock at all times. Everyone is familiar with the common goldfish, but we are going to give brief descriptions of some of the newer varieties.

THE COMET—Is similar to the Common, but has an extraordinary development of fins, both in size and length. The tail is about the same length as the body. The color is red and is sometimes spotted with black and silver.

THE JAPANESE NYMPH—Is short and plump, such as is characteristic of the fish developed by the Japanese. In color they are red with the fins and tail sometimes being white. Single tails very transparent and well shaped.

THE JAPANESE FANTAIL—Is another of the fish having a short, plump body, but have elaborate fin developments. Some Fantails have completely double tail fins, which are either long and deeply cleft or broad and cleft less than one-third their length. Colors red, gold, sometimes black, spotted red and white, red and black.

CHINESE RED TELESCOPES—Have weird and startling features suggestive of Chinese art. Their eyes are protruding and vary in shape and direction. Their bodies are shorter than the Comet but not so chunky as the Japanese fish, with coloring varying from pure red to spotted silver, red and black.

CHINESE MOORS—Are the same in shape and features as the Telescope, but are an ebony black with no other coloring. Very attractive and sometimes have very beautiful fantails.

THE SHUBUNKIN—Is scaleless, with pearl background, black eyes, and patches of black, red and blue color. No two are just alike. The body is similar to the Comet and Shubunkin is almost as active in the water. No aquarium is complete without some of these colorful fish.

SHIPMENT—Fish must be shipped by express. All prices are F.O.B. Wichita. Six or less fish can be shipped in a gallon pail, for which a charge of 25c is made. More than six fish will require a larger container, and up to twenty fish can be shipped in a 50c pail.

CARE

Fish are cared for very easily. Care should be taken not to over-feed and any food left in the water after feeding should be removed. Water should be changed about once a week in the winter and three to four times a week during the summer months. When changing the water be sure the water is the same temperature as that in the bowl. Fish moss should be kept in the aquarium at all times as it tends to keep the water aerated and the fish in good condition.

SHELLS AND CHIPS

	Lb.	3 Lbs.
Dyed Pearl Chips (waterproof)	10c	25c
White Pearl Chips (waterproof)	10c	25c
Dyed Shells (many colors)	20c	50c

Prices F.O.B. Wichita

COMMON

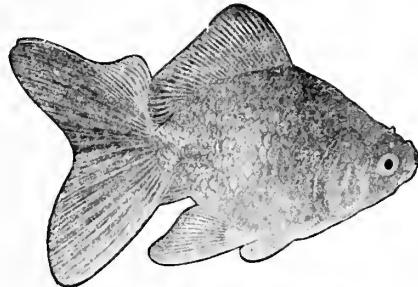
	Each
Small, 1½-2 inches	.10
Medium, 2-2½ inches	.15
Large, 3-4 inches	.20
Fountain size, 5-6 inches	.30

COMETS

	Each
Medium, 2½-3½ inches	.20
Large, 3½-5 inches	.35
Extra large, 5-6 inches	.50

JAPANESE NYMPHS

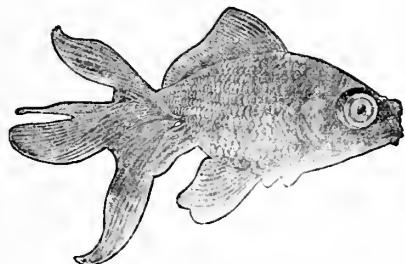
	Each
Small, 2½ inches	.20
Medium, 2½-3 inches	.25
Large, 3-4 inches	.30



Japanese Fantail

JAPANESE FANTAILS

	Each
Small, 2 inches	.20
Medium, 2-2½ inches	.30
Large, 2½-3½ inches	.40
Extra large, 3½-5 inches	.60



Chinese Telescope

CHINESE RED TELESCOPES

	Each
Small, 2 inches	.40
Medium, 2-2½ inches	.70
Large, 2½-3½ inches	.85

CHINESE MOORS

	Each
Small, 2 inches	.50
Medium, 2-2½ inches	.80
Large, 2½-3½ inches	1.00

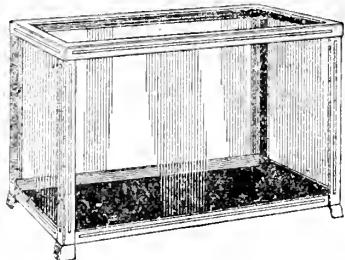
SHUBUNKINS

	Each
Small, 2 inches	.20
Medium, 2-2½ inches	.25
Large, 2½-3½ inches	.35
Extra large, 3½-5 inches	.60

FISH FOOD

Imported Wafer Food, per pkg.	10c Postpaid	15c
Spratt's Natural Food, per pkg.	10c Postpaid	15c
Imported Shrimp Food	15c Postpaid	20c
Tu-Joe, Fish Tonic	20c Postpaid	25c
Health Dip, for Goldfish	25c Postpaid	30c
Fungus Remedy	25c Postpaid	30c
Zeke—Dried flies for fish and turtles	15c Postpaid	20c
Fish Moss, per bunch	10c Postpaid	15c
Aquarium Cement, per pkg.	25c Postpaid	30c
Aquarium Cement, large pkg.	\$1.00 Postpaid	\$1.10

Write for Book on the Care of Goldfish—"Aquaria"—30c postpaid

**STYLE 100 AQUARIUM**

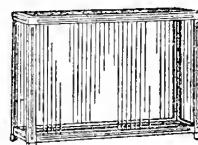
Steel frame, welded, in five standard sizes.

	Size Inches L'gth Width H'gth	Cap. Gals.	Ship. Wt. lbs.	Price Each
No. 101	10 x 6 x 7	1.8	6	\$1.50
No. 102	12 x 7 x 7	2.3	8	2.50
No. 103	14 x 8 x10	4.8	11	4.00
No. 104	16 x 9½x10	6.0	14	4.75
No. 106	18¾x11½x12	10.5	22	9.50

**STYLE 150 AQUARIUM**

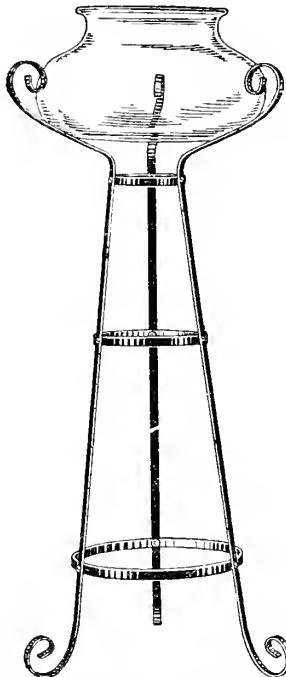
Steel frame, especially for window displays, one standard size

No. 153	Size Inches L'gth Width H'gth	Cap. Gals.	Ship. Wt. lbs.	Price Each
	30 x 8 x10½	8	60	\$9.50

**STYLE 140 AQUARIUM**

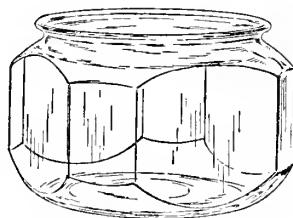
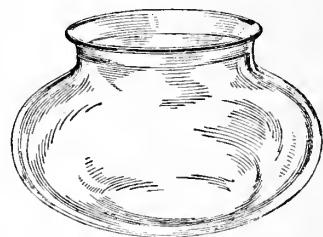
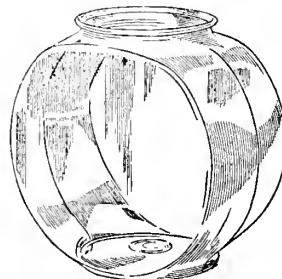
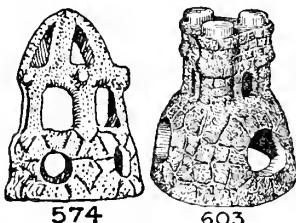
A window display aquarium, especially for small tables, being very narrow. Steel frame finished in green with gold striping.

No. 142	Size Inches L'gth Width H'gth	Cap. Gals.	Ship. Wt. lbs.	Price Each
	16 x 5¾x11	4	10	\$3.50



Style S42 Folding Stand, for Style G or B Bowls, two gallon sizes, clear or green. Finish blue and red. Height, 37 inches. Each \$1.25

Style S40 Folding Stand, for Style F Drum Bowl, two-gallon size, clear or green. Finish either red, green or black. Height, 37 inches. Price each \$1.35

**STYLE K BOWL**
A new octagonal shape.**STYLE B BOWL**
The popular squat shape**STYLE F BOWL**
The round drum shape**STYLE G BOWL**
The new common sense bowl.**CASTLES**
No. 574, height 4 in., each \$.25
No. 603 height 4 in., each \$.25**AQUARIUM CEMENT**
Aquarium cement is successful only when mixed with proper grade of oil. This package contains dry cement powder with a can of especially prepared oil.1½-pound package each \$1.00
Home size package each .25

	Clear Glass	Green Glass
1 qt., each	\$.15	\$.20
2 qt., each	.20	.30
1 gal., each	.40	.60
2 gal., each	.75	1.40

Prices F.O.B. Wichita

NOVELTY FLOATERS (Celluloid)

Ducks, Turtles, Frogs, each 10c

DIP NETS (Imported)

100-3½" Knitted, Wood handle with Ferrule, each 25c

175-4" Knitted, Wood handle with Ferrule, each 35c

All prices on this page f.o.b. Wichita

Champion Dog Food



Champion Dog Food is a complete and balanced diet for all ages and breeds of dogs. It is made from clean, fresh, wholesome ingredients. It contains a large content of fresh meat, white flour, whole wheat corn meal and oat meal, iodine as a preventive of goiter, pure cod liver oil to furnish vitamins and prevent rickets, and various mineral salts to strengthen the bones. All phases of a dog's food requirements are satisfied with Champion Dog Foods.

CHAMPION DOG BISCUIT

This is the large whole biscuit for the mature dog.

CHAMPION KIBBLED DOG FOOD

This is exactly the same as the whole biscuits, excepting that it is broken into small pieces for convenience in feeding.

CHAMPION PUPPY BISCUIT

This is the small, thin biscuit made especially for the small dog and the growing pup.

CHAMPION PUPPY MEAL

This food is similar to "Kibbled," but it is ground finer for the pup just weaned and up to three or four months of age.

All the above Dog Foods at following prices:

4-pound package	\$.50
25-pound bag	2.65
50-pound bag	5.00
100 pounds in bags	10.00

CHAMPION DOG FOOD

A delicious, palatable, nutritious meat food for dogs, cats or other meat eating animals. Prepared after a tested formula, by an Animal Nutrition Specialist, and highly recommended for its health-giving properties. It is a combination of meat, milk, cereals, vegetables and cod liver oil, cooked, ready to serve.

1 can, 16 oz.	\$.20
3 cans, 16 oz.	.50
12 cans, 16 oz.	1.80
48 cans, 16 oz.	6.50

CHAMPION CAT MEAL

This food looks like Puppy Meal, but it is finer ground and contains those ingredients necessary to the welfare of cats and kittens.

2-pound package	\$.30
4 pound package	.55
25 pound bag	2.75

Let us send you a free copy of the Champion Booklet on "The Proper Care and Feeding of Dogs." Prices subject to change without notice.

Above prices are F. O. B. Wichita.

Spratt's Dog Medicines

Price Includes Postage, Except Where Noted

Spratt's Cooling and Alterative Tablets. For heated blood etc.	\$.60
Spratt's Anti-Rickets Tablets. A bone and muscle builder	.60
Spratt's Anti-Asthmatic Tablets. For Asthma, etc.	.60
Spratt's Anti-Vomit Tablets	.60
Spratt's Chorea Tablets. For Chorea, St. Vitus' Dance, etc.	.60
Spratt's Chronic Skin Disease Tablets. For obstinate cases of Mange and Eczema	.60
Spratt's Cough Tablets. Generally effect a quick cure	.60
Spratt's Constipation Tablets. A gentle and effective Laxative	.60
Spratt's Digestive Tablets. For severe cases of indigestion	.60
Spratt's Diarrhoea Tablets. To relieve Diarrhoea, which usually follows changes of food, etc., etc.	.60
Spratt's Fevertone Tablets. For treating distemper	1.00
Spratt's Dip. Postage, 15c	.60
Spratt's Ear Canker Ointment. For both internal and external forms of this disease	.75
Spratt's Eye Lotion Tablets. A safe and efficient remedy	.60
Spratt's Eczema and Sarcoptic Mange Medicine	.60
Spratt's Flea Powder. Aids in removing certain parasites from dogs, cats and other animals. Per tin	.30
Spratt's Hair Stimulant and Restorer	.60
Spratt's Kidney Tablets. For Cystitis or inflammation of the Bladder, etc.	.60
Spratt's Liniment. For Rheumatism, Sprains, Bruises, Lameness, etc., and may be used for human treatment as well	.60
Spratt's Liver Tablets. A safe and reliable remedy	.60
Spratt's Mange Medicine	.75
Spratt's Purgative Tablets. Perfectly safe and effective	.60
Spratt's Rheumatism Tablets. For internal treatment	.60
Spratt's Tonic and Condition Tablets. To build up after sickness and to put in bench show form, etc.	.60
Spratt's Tonic and Condition Tablets for Toy Dogs and Puppies	.60
Spratt's Tonic and Condition Tablets for Cats	.60
Spratt's Fevertone Tablets For Cats. For treating distemper	1.00
Spratt's Worm Capsules. An expellent of Round and Maw	.60
Spratt's Tape Worm Capsules	.60
Spratt's Worm Capsules for Puppies. May be given with perfect safety to puppies from six weeks old to six months	.60
Spratt's Worm Capsules for Cats	.60

SPRATT'S FOOD FOR DOGS

SPRATT'S FIBO—A unique dog food containing a larger percentage of Spratt's world famous Meat-Fibrine. It is very appetizing and highly recommended for shy or dainty feeders. Can be given thoroughly dry or soaked, 2 lbs., 35c; 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.90; 100 lbs., \$15.00.

SPRATT'S OVAL (The Pocket Dog Biscuit) — A small Meat-Fibrine dog biscuit suitable as a staple diet for small dogs and toys. 2 lbs., 30c; 4 lbs., 55c; 10 lbs., \$1.35.

Above Prices are F. O. B. Wichita

Prices Subject to Change Without Notice

Sergeant's Remedies

Sergeant's Special Medicine. For treating distemper in pups and dogs	\$1.20
Sergeant's Mange Medicine. For treating skin and blood diseases	.65
Sergeant's Condition Pills. A tonic and alterative for pups and dogs	.60
Sergeant's Sure Shot Capsules. For roundworms, pin-worms and hookworms in older pups of any breed; also for large and older dogs	.60
Sergeant's Puppy Worm Capsules. For young pups and toy breeds	.60
Sergeant's Sure Shot Liquid. For pups and older dogs. For owners who prefer a liquid vermifuge	.60
Sergeant's Tapeworm Medicine. For tapeworm in pups and dogs	.60
Sergeant's Arsenic and Iron Pills. A blood purifier. For treating blood and skin diseases	.60
Sergeant's Canker Wash. For treating internal and external Ear Canker	.60
Sergeant's Mouth Wash. For treating Sore Mouth and Black Tongue	.60
Sergeant's Compound Pepsin Tablets. For treating Indigestion, Vomiting and Colic in pups and dogs. Splendid for pups at weaning time	.60
Sergeant's Intestinal Astringent. For treating Diarrhoea and Dysentery in pups and dogs	.60
Sergeant's Expectorant Medicine. For Coughs, Colds and Asthma in pups and dogs	.60
Sergeant's Liniment. A splendid liniment for lameness, sore muscles and swollen limbs in pups and dogs	.60
Sergeant's Eye Wash. For treating eye trouble in pups and dogs	.60
Sergeant's Laxative Capsules. For treating Constipation in pups and dogs	.60
Sergeant's Nerve Sedative Medicine. For Running-Barking Fits	2.00
Sergeant's Carbolic Tar Soap. A splendid all-purpose soap	.25
Sergeant's Skip-Flea-Sap. A wonderful bath soap for pups and dogs. Will kill fleas, lice and certain other vermin. A pure high-grade soap that soothes the skin and leaves coat soft and fluffy	.25
Sergeant's Skip-Flea Powder. For fleas and lice on dogs and cats. Will not nauseate and is not injurious	.25
Sergeant's Disinfectant. An antiseptic and insecticide, cleaner and deodorant. Aids in preventing disease. 4 oz. bottle	.25

VERMEX

Vermex—A liquid soap that destroys fleas, lice and other parasites at the same time that it cleans the coat and skin. Imagine what it means to your pets to be free from bothersome fleas all summer, and it's such a simple matter. You just bathe them in Vermex twice a month. One-fourth pint, 80c; pint, \$2.50; quart, \$4.00, f. o. b. Wichita.

MINEROLA

Minerola as an aid in keeping the stomach in working condition and maintaining the appetite during the nursing period of Distemper, is unquestioned by all who are familiar with its effectiveness in getting the stomach right while nature does the rest. FITS—when caused by an acid condition due to diet, Minerola will relieve if given promptly and continued until this condition is corrected. Minerola is harmless, and fear of an overdose is not worth taking into consideration.

Minerola Dog Size Capsules, \$1.00, postpaid. Minerola Puppy Size Capsules, \$1.00, postpaid.

Cooper Remedies

PULVEX FOR DOGS—The breeder and fancier of fine dogs will enjoy the thorough effectiveness of Pulvex in ridding his animals of fleas, lice, or ticks, 2 oz. Sifter Top Can, 50c; postpaid, 60c; 12 oz. can, \$1.25; postpaid, \$1.35.

PULVEX FOR CATS—Is the safe dusting powder for cats. It effects them in no way physically and yet only one application rids them of lice and fleas. Kittens may be liberally dusted with Pulvex without the slightest danger of poisoning or irritation. No toxic effect will be experienced should they get Pulvex into their stomachs by licking their coats. 2 oz. Sifter Top Can, 50c; postpaid, 60c.

KUR-MANGE—Is a fine powder, to be dissolved in water and applied either as a wash, bath, or dressing. In addition to mange, it is highly effective in curing many superficial skin diseases such as eczema and ringworm. 3 oz. can (makes one gallon) 75c; postpaid, 80c; 6 oz. can (makes two gallons), \$1.00; postpaid, \$1.10.

COOPER CAPSULES—(Tetrachlorethylene C. P.)—This substance was discovered by the Department of Agriculture, thoroughly tested by them as a very superior destroyer of stomach worms, round worms and hook worms in sheep, cattle, hogs, foxes, dogs, cats, and poultry. Unlike some other drugs, it does not sicken the animal or retard growth, but restores natural functioning without harm to the animals.

	Box 12	Box 50	Box 100
No. 29—0.2 cc (3 min.)	\$.30	\$.60	\$ 1.15
No. 31—1.0 cc (16 min.)	.45	1.20	2.25
No. 32—2.5 cc (40 min.)	.60	1.90	
No. 33—5.0 cc (80 min.)	.70	2.50	

KIPPY FOR DOGS—Can be used as a complete food or you can mix it with Kibbled dog foods, Kippy is rich in meats, cereals, vegetables and calcium phosphates. In two sizes. 10 oz. can, 10c; 12 cans, \$1.15; per case of 48 cans, \$4.40; 16 oz. can, 15c; dozen cans, \$1.75; case, 24 cans, \$3.25.

NOPCO Cod Liver Oil should be given to dogs to avoid rickets and to supply vitamin A and D in satisfactory strength. Quart, 75c; gallon, \$2.50.

Dog Collars

Each and Every Dog Needs a Collar

LEATHER COLLARS

	Length inches	Width	
No. X106	12-14-16-18	½"	\$.25
No. 803	12-14-16-18	½"	.40
No. 1331	14-16-18-20	¾"	.60
No. 903	14-16-18-20	½"	.55
No. 901	14-16-18-20	¾"	.65
No. 713	16-18-20-21	1 "	.95
No. 0403	16-18-20-21	1 "	1.50
No. 8096	16-18-20-21	1¼"	1.75

ROUND COLLARS

	Length Inches	Width	Price
No. 254	16, 18, 20	⅝ in.	\$1.75
No. 256	16, 18, 20	1 in.	2.00

ROUND CHOKE COLLARS

	Length Inches	Width	Price
No. 242	18, 20, 21, 22	1 in.	\$2.45

FANCY DOUBLE SEWED LEATHER COLLAR

	Length Inches	Width	Price
No. 248	16, 18, 20	1 in.	\$2.00
No. 246	16, 18, 20	1¼ in.	2.25

Dog Furnishings

PATENT LEATHER

	Length Inches	Width 5/8 in.	Price
No. 164	12, 14, 16, 18		\$1.25

WOVEN LEATHERS LEADS

No. 449, 3 feet long		\$.25
No. X, 3 feet long		.40
No. 350, 3 feet long		.55
No. 460, 3 feet long		.65
No. 1022, 4 feet long		.60
No. 340, 4 feet long		.75

SLIP-OVER COLLAR RING LEADS

4 feet long, 1/4 in. wide for toy dogs, Russet Leather	\$1.75
4 feet long, 1/2 in. wide for larger dogs	2.25
4 feet long, 3/4 in. wide for larger dogs	2.75

CHAIN LEADS

No. 9, 3 feet long, very light	\$.25
No. 2, 3 feet long	.45
No. 3, 3 feet long, medium	.50
No. 1, 4 feet long	.80

RUBBER DOG BONES—25c each; 30c postpaid.

RUBBER BALLS—25c, 50c each; 30c, 55c postpaid.

BABY KATNIPS—Me-ows, rattles, and makes faces when

squeezed, roly-poly everywhere and has ears just right to grab and shake them by. Lots of fun for the dog.
Each 50c

KAT-NIP—Larger than above, black rubber. The only real plaything for the dog to "fetch" and frolic with.
Each \$1.00

KATNIP MOUSE—This mouse is guaranteed to be stuffed with absolutely pure Katnip leaves and blossoms. Katnip Mouse makes cat or kitten playful, happy and strong.
Each 15c; 20c postpaid.

CATNIP BALL—And a quantity of Catnip beneficial to Cats, 15c each; 20c postpaid.

CATNIP—Leaves and blossoms of selected and cured catnip, free from stems, hay, weeds, dust and dirt. 15c each; 20c postpaid.

Willow Sleeping Baskets for Pet Dogs and Cats—Keeps them from sleeping on beds, chairs, etc.

	Heighth	Length	Width	Price
No. 2, Small	18 in.	17 in.	12 in.	\$3.50
No. 3, Medium	20 in.	19 in.	13 in.	4.00
No. 4, Large	22 in.	22 in.	14 in.	4.50
No. 5, Extra Large	24 in.	24 in.	16 in.	5.40

DOG SWEATERS—Sizes 10, 12, 14, 16, 18, 20,
inches \$1.95

DOG BLANKETS—Sizes 10, 12, 14
-Sizes 16, 18, 20 \$1.75

RAFFIA

RAFFIA—Is the name given to a long-leaved plant found on the island of Madagascar. As a weaving material, it is ideal, combining as it does, softness and flexibility with great strength.

List of Colors—

Black	Orange			
Dark Blue	Pink			
Light Blue	Purple			
Dark Brown	Bright Red			
Light Brown	Dark Red			
Bright Green	Medium Red			
Dark Green	Yellow			
Emerald Green	Lavender			
Prices.	Bunch	1/4 lb.	1 lb.	5 lbs.
Colored Raffia	\$.15	\$.40	\$1.10	\$5.00
Natural Raffia	.10	.20	.50	2.25

Prices subject to change without notice. All prices F.O.B. Wichita.

RAFFIA NEEDLES—Numbers 18-19, 20; 6 needles for 10c, 25c pkg., postpaid.

BASKETRY BOOKS—Priscilla, illustrated, 40c each, postpaid.

REED

Genuine Reed, manufactured from high grade East India Rattan. In natural color only.

Prices of GENUINE REED—	1/4 lb.	1 lb.	5 lb.
No. 0	\$.50	\$1.50	\$6.50
No. 1	.40	1.25	5.50
No. 2	.35	1.20	5.00
No. 3	.25	1.00	4.50
No. 4	.25	.80	3.65
No. 5	.25	.75	3.30
No. 6	.20	.65	2.90
No. 7	.20	.60	2.80
No. 8	.20	.60	2.80
Flat Reed, 1/4 inch	.20	.60	2.80
Winding Reed	.30	.90	4.15
Split No. 6	.20	.80	3.65

Prices subject to change without notice. All prices F.O.B. Wichita.



WOOD BASES

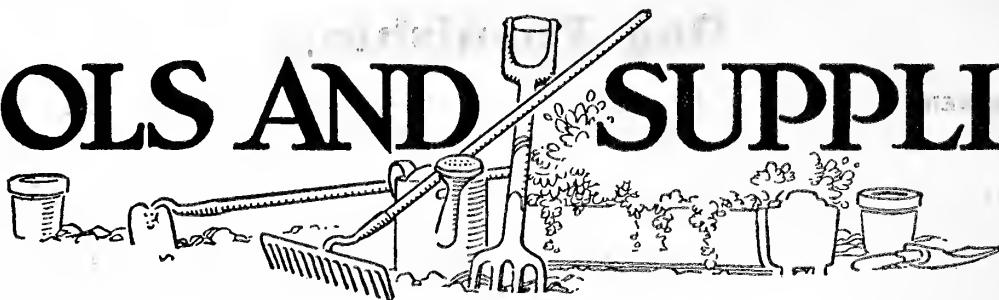
We have in stock Wood Bases, for Reed Baskets, Trays, etc., made of 3-ply birch, bored for different size reeds. We carry regularly Oval, Rectangular, and Round Bases, those usually wanted for making work baskets, serving trays, coasters, etc. We can supply some others and if you need some shape not quoted, please write us, giving size and shape wanted.

Oval	Rectangular	Round
3 x 6" Each \$.20	10 x 16" Each \$.75	3" Each \$.09
6 x 10" ..... .30	12 x 18" ..... .90	5" ..... .15
8 x 14" ..... .60	14 x 20" 1.20	6" ..... .20
12 x 20" 1.00		8" ..... .30
		10" ..... .50
		12" ..... .60

Add 10c extra for packing and postage of wood bases.

Schools, Clubs and dealers who buy in larger quantities will receive a quantity price on request.

TOOLS AND SUPPLIES



NO. 4 PLANET JR., COMBINED HILL AND DRILL SEEDER AND WHEEL HOE

Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates.

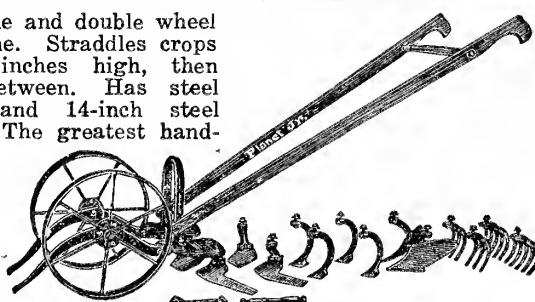
NO. 4, Complete \$18.00



NO. 4D, Hill and Drill Seeder, same as above less the cultivating attachments \$14.25

NO. 11 PLANET JR. DOUBLE WHEEL HOE CULTIVATOR PLOW AND RAKE

A single and double wheel hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-



cultivating tool in the world.

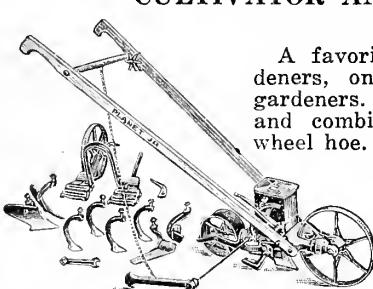
NO. 11, Planet Jr. Cultivator \$13.75

NO. 12, Planet Jr. Cultivator, less rakes, shown above \$10.75

NO. 17½, Planet Jr., Cultivator \$6.75

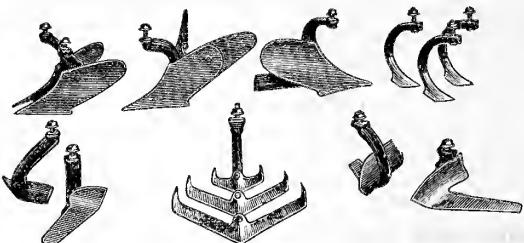
NO. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW

A favorite among market gardeners, onion growers, or large gardeners. It is a perfect seeder and combined double and single wheel hoe.



NO. 25, Complete \$21.50

EXTRAS FOR PLANET JR. TOOLS



	Price	Weight Lb.	Weight Oz.
Plow for Single Wheel Hoe, each	\$1.10	2	8
S100/101 Hoe, 7½-inch Blade, pair	1.50	2	
S100/101 Hoe, 6-inch Blade, pair	1.30	2	
Rakes. Each, 3-tooth, 65c; 5-tooth	.85	1	
Disc Hose, pair	3.50	5	10
Three-Prong Cultivator Teeth, each	1.00	1	
Cultivator Teeth, each	.40		7



GARDEN PLOWS

The high wheel garden plow is a universal favorite with the truck farmer or gardener where the work is sufficient to justify separate machines for seeding and cultivating. It has all the equipment for plowing and hillling, raking and cultivating either wide and shallow or narrow and deep; 24-inch high wheel is used which makes traction very easy.

NO. 242, each \$3.75

A good Garden Cultivator lightens the work and helps to make a better garden.

SPRAYERS

HUDSON PERFECTION SPRAYER

High Pressure, highest quality, most satisfactory—For work of any kind requiring a high pressure compressed air sprayer, the Perfection is supreme. It is very useful around the orchard, vineyard, truckgarden or farm, in dairy barns, hog houses, poultry coops, etc.

Tank: $7\frac{1}{2}$ inches diameter, 20 inches high; capacity approximately 4 gallons. All seams are riveted and soldered. Tested under actual working conditions before it leaves factory. Made of first quality copper-bearing galvanized or brass sheets. Brass is recommended

for use with corrosive

solutions because it better resists their action.

Pump: Seamless brass tubing, $1\frac{3}{4}$ inches diameter, $15\frac{1}{2}$ inches long. Ample capacity to develop the pressure for which the Perfection is noted.

NO. 110 GALVANIZED. F.O.B. Wichita, each \$6.00

NO. 111 BRASS. F.O.B. Wichita, each \$8.50

NO. 140 HUDSON JR.—Same construction as above. Capacity about $2\frac{1}{2}$ gallons.

NO. 140G GALVANIZED. F.O.B. Wichita \$4.50

NO. 140B BRASS. F.O.B. Wichita \$6.50

THE HUDSON BARREL PUMP—Is powerful, light and durable. It will maintain a continuous nozzle pressure of 200 pounds, and has ample capacity for two lines of hose.

Cylinder: Seamless brass tubing, $1\frac{3}{4}$ inches diameter, 6 inches long.

Air Chamber: High Carbon Steel, 2 in. diameter, 30 in. long, light and strong.

Plunger: Fitted with Hudson special cupped plunger leathers, treated to withstand the action of chemicals.

Valves: Bronze balls. Both intake and outlet mounted in same cage, fitted with brass wire screen to protect them from sediment. Easily removed for cleaning, inspection, etc., without dismantling pump.

Agitator: Dasher type, driven with each stroke of the pump. Insures a thoroughly mixed solution at all times.

Attachments: Chime attachment is furnished on all orders unless otherwise specified. Fittings for mounting on the head or the side of the barrel can be furnished at a small additional cost.

NO. 43 PUMP only. Shipping weight, 30 pounds. F.O.B.

Wichita, each \$13.00



THE NEW MISTY SPRAYER

A general purpose sprayer for farm, stable or garden uses; handles fly oils, bug poisons, and disinfectants; has large, powerful pump; lined can screw; made of heavy tin; holds 1 quart. Price

45c



HUDSON MAJOR DUSTER

Handles Paris Green Arsenate of Lead, Cyanogas Dust and similar poisons. Powder reservoir $2\frac{3}{4}$ inches in diameter, 5 inches long. Fitted with powder strainer, 2-12 inch discharge tubes and two tips. The narrow angle tip is for dusting undersides of leaves, plants, etc., the broad angle tip for use where larger areas are to be covered. Each

95c



THE HUDSON CADET DUSTER—Because of its size and efficiency it is a favorite with the housewife in applying roach, ant, and various bug powders.

NO. 663. F.O.B. Wichita, each

45c



HUDSON MODOC BUCKET SPRAY PUMP

It is double acting and continuous, developing 150 pounds nozzle pressure. Makes a very convenient portable outfit because it can be used with a bucket or small tank. Valves and plunger are accessible for cleaning, etc. Nozzle discs are reversible or removable, producing any desired spray from the very finest to a solid stream. All parts except the handle and foot rest are brass.

F.O.B. Wichita, each

\$3.95

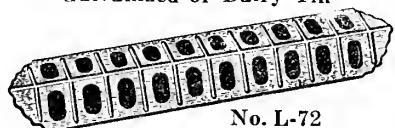
THE CYCLONE SEEDER—Sows all kinds of grain and seeds perfectly—oats, cowpeas, millet, alfalfa, clovers, etc. Each, \$2.00, postpaid.



THE SOWER THAT SCATTERS EVENLY

OAKE'S QUALITY POULTRY EQUIPMENT**GRILL TYPE CHICK FEED TROUGH**

Galvanized or Dairy Tin



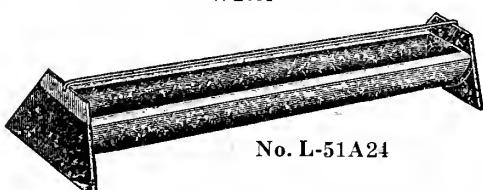
No. L-72

Heavy seamless Trough. Gable shape sliding cover prevents chicks from getting into Trough or wasting feed. Galvanized for dry mash or charcoal tin for wet mash or milk.

Catalogue No.	GALVANIZED	
Length—Inches	L-71G	L-72G
	10	20
Price each	Ea. 15c	25c

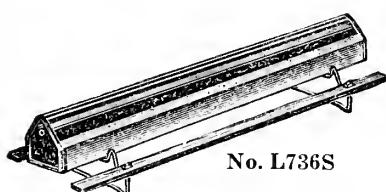
ROUND BOTTOM CHICK TROUGH

Adjustable Wire Guard—Soldered Ends—Holds Feed or Water



No. L-51A24

Catalogue No.	L-51A24
Length	24"
Depth	2 1/4"
Price each	30c

REEL GUARDED CHICK TROUGH

No. L736S

This popular Trough has improved revolving metal reel with 4 plates having rounded edges to prevent injury to chicks. Reel is adjustable. Turned edges prevent feed waste. Rigid stand and

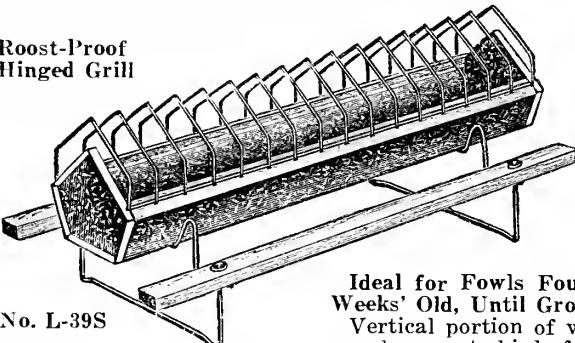
perch at a slight extra cost.

Troughs Only

Catalogue No.	L-724	L-736	L-748
Length, inches	24	36	48
Width, inches	3 1/2	3 1/2	3 1/2
Depth, inches	2	2	2
Price each	45c	65c	85c

GRILL TYPE BROILER FEEDER

Roost-Proof
Hinged Grill



No. L-39S

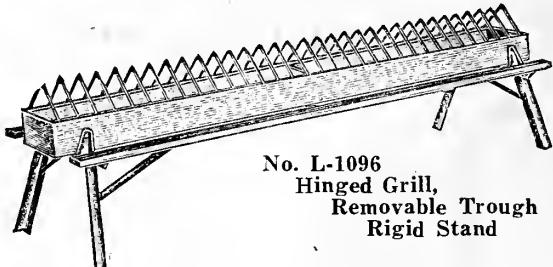
Ideal for Fowls Four Weeks' Old, Until Grown Vertical portion of wire guard prevents birds from

getting foothold on trough. Turned edge of trough prevents feed waste. Made in both galvanized and charcoal dairy tin.

Troughs Only
Galvanized

Catalogue No.	L-39	L-3942
Length, inches	28	42
Width, inches	6 3/4	6 3/4
Depth, inches	3	3
Price, each	\$1.00	\$1.25

f. o. b. Wichita

GIANT FLOCK FEEDER

No. L-1096
Hinged Grill,
Removable Trough
Rigid Stand

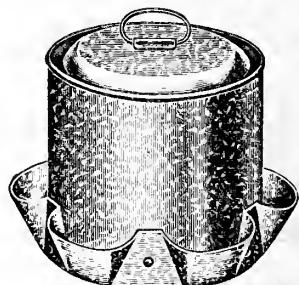
Heavy square bottom Trough of galvanized steel with V-shaped galvanized wire guard. Hinged wide flange to prevent feed waste. Rigid galvanized steel stand equipped with wood perches. Trough can be lifted out for easy cleaning.

Catalogue No.	L-1096	L-1060	L-846	L-646
Length	8 ft.	5 ft.	46 in.	46 in.
Width of Trough	10 in.	10 in.	8 in.	6 in.
Depth of Trough	5 in.	5 in.	4 in.	3 1/2 in.
Height of Perch	16 in.	16 in.	14 in.	10 in.
Each	\$6.50	\$4.25	\$3.90	\$3.05

**CHICK PROOF
MASON JAR FOUNTS**

No. L68T

Pan is
seamless die
drawn.
Hinged so
that it is not
necessary to
remove fount
for filling. In
both galva-
nized and
dairy tin for
use with any
Ball Mason
Jar.

SNAP-ON CHICK
WATERERS

Six large drinking spaces.
Held in place by friction.
Invert to fill. Fountain can
be carried by handle.

No. L-100B

Catalogue No.	L-68G	Dairy Tin	L-68T
Each	10c	10c	



No. L. 31

Fount Heaters Only
For Size Founts
Price each

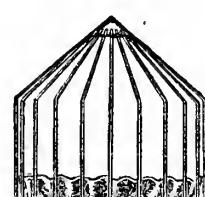
E-Z-FILL FOUNT

Splendid low priced fount. Roost-proof conical top. Outer tank used as bucket for filling. Automatic spring valve. For hens or baby chicks. Winter founts have kerosene heaters.

SUMMER WINTER
Catalogue No. L-31 L-32 L-31A L-32A
Capacity, gallons 3 5 3 5
Diameter of Pan 13 1/4 15 3/4 13 1/4 15 3/4
Heater used L-42 L-42 L-42 L-43
Each 2.00 2.40 3.70 4.40
No. L-44 No. L-42 No. L-43
3 gal. 5 gal. 8 gal.
\$1.60 \$2.00 \$2.25

RED TOP WIRE GUARDS

For Crocks or Pans



The solution of the problem of feeding clabber buttermilk. No. 10 gauge galvanized wire. Rigid and strong. Pan shown in illustration is not included.

Catalogue No. L-612	L-614	L-617
Diameter 12 in.	14 1/2 in.	17 in.
Height 12 1/2 in.	14 in.	15 in.
Feeding spaces 21	21	21
Price each 50c	60c	70c

OAKE'S QUALITY POULTRY EQUIPMENT

CELLULOID LEG BANDS

Made of spring pyralin. Slip on like a key ring—cannot come off. Furnished in Red, Green, Amber, Black, White, Pink, Yellow, Ruby, Light Blue and Dark Blue.
 No. LLB-4—Baby Chick bundles of 50 20c
 No. LLB-6—Pigeon bundles of 50 20c
 No. LLB-8—Bantam bundles of 50 25c
 No. LLB-9—Leghorn bundles of 50 30c
 No. LLB-11 American bundles of 50 35c
 No. LLB-12—Asiatic bundles of 50 35c
 No. 117 Aluminum Leg Bands, Adjustable Double Lock. Numbered 1 to 1000. Per 100 50c



With this small punch you can make a hole through the web between the toes of the chicks. In this way you can distinguish the chicks.
 No. L125, each 25c
 postpaid 25c

MONEY BACK POULTRY PUNCH

A heavier punch, hangs handily from the finger, guaranteed to do clean cutting.
 No. 118 Each (postpaid) 40c

THERMOMETERS



Taylor Brothers Incubator Thermometers, 75c each; postpaid, 85c.

Taylor Brothers Brooder Thermometers, 65c each; postpaid, 80c.

Tycoes Certified Incubator Thermometer

Engraved tube, every fifth line and figure stamped on the scale. Each one accompanied by maker's certificate of accuracy. Each, \$1.25.

American Incubator Thermometers—tested for accuracy, fitted on white enamel stand. 90c each, postpaid.

BLUE FLAME BROODER

With Chick Saver Heat Equalizer

Fumeless—Smokeless
Wickless



No. L-781
Thermostat Heat Control

Extra large burner provides adequate heat under all conditions. Automatic temperature control by Wafer Thermostat regulates burner level. Chick Saver Heat Equalizer attaches to burner jacket. Breaks up the intense heat near burner, radiates and diffuses the heat evenly throughout the canopy and increases chick capacity of brooder.

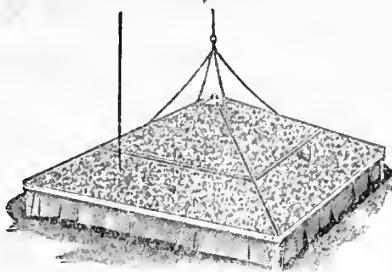
Catalogue No.	L-780	L-781
Size canopy 42 in.	52 in.	
Chick capacity 500	750	
Price each \$15.95	\$16.95	

Same as Above Except Hand Operated

Catalogue No.	LH-780	LH-781
Size Canopy 42 in.	52 in.	
Price each \$11.50	\$13.55	

f. o. b. Wichita

OAKES ELECTRIC BROODERS



Positive and automatic control of the temperature together with low current consumption makes this the most ideal brood unit on the market. Fire hazards are absolutely eliminated and there are no dangerous gases to kill chicks. Much labor is saved since there are no ashes to carry, no coal to handle and no attention necessary during the night. Positive circulation under canopy prevents sweaty chicks.

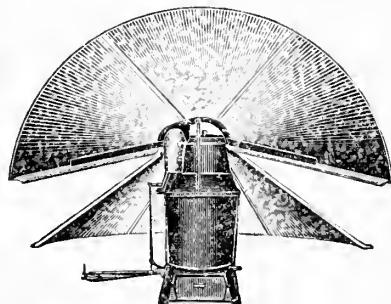
Hover is insulated to prevent heat loss and even distribution of heat is secured by the patented enclosed electric heating element, which gives greater diffusion and radiation of heat than any other type of element known. Furnished complete with 8 ft. of rubber covered drop cord, automatic temperature control, heavy double canvas curtains and adjustable legs.

Catalogue No.	L-722	L-732	L-742	L-752	L-784
Size, inches	22x22	32x32	42x42	52x52	52x84
Chick capacity	75	150	250	385	625
Wattage of					
Htg. Elmt.	300	300	500	660	1000
K. W. used per day	2	3.5	6	7.5	12.
Price each	\$10.50	\$16.00	\$20.00	\$24.00	\$42.00
Chain and Hoist, extra	\$2.00 on all sizes. Rope not furnished.				

RED-OAKES BROODER STOVE

12 OUTSTANDING OAKES FEATURES

1. Suspension of canopy from top of magazine saves 50% of heat usually wasted.
2. Large non-clogging magazine.
3. Quick detachable magazine lid and ash pitdoor.
4. Insulated fire-safe stove bottom.
5. Safety two-piece canopy.
6. No ropes or pulleys.
7. Holds soft coal fire over night.
8. Properly located double thermostat.
9. Fuel-saving draft equalizer.
10. Large shaker grates.
11. Long bolt braces prevent warping.
12. No baffle plate to clog with soot.



The stove that saves the heat. Outvalues other stoves in 12 distinctive ways. Holds fire overnight with soft coal. Broods more chicks with less coal. Canopy in two sections, lifting up and held in open position for easy attention to the stove, cleaning the brooder house and removing eggs.

Catalogue No.	L-54	L-62	L-68
Height overall 27 1/2 in.	30 in.	35 in.	
Diameter top of firebox 10 in.	11 in.	13 1/2 in.	
Diameter of grate 8 3/4 in.	9 3/4 in.	10 5/8 in.	
Coal capacity 40 lbs.	52 lbs.	72 lbs.	
Weight (crated) 110 lbs.	132 lbs.	162 lbs.	
Canopy 54 in.	62 in.	68 in.	
Chick capacity 750	1,000	1,200	
Stove pipe (not furn.) 4 in.	5 in.	5 in.	
Price each \$19.50	\$22.50	\$26.50	

Draft Equalizer Furnished With Stove



Have a *Conkey* corner in your Poultry House

Ready for
Emergency

Install a Conkey Corner of remedies in your poultry house as insurance against disease, trouble, loss and disappointment.

CONKEY'S POULTRY BOOK FREE if you call at our store, or mailed for 6 cents in stamps.

CONKEY'S
(THE ORIGINAL)
STARTING FEED
with BUTTERMILK and

Y-O

CONKEY'S OLD RELIABLE POWDED—(Formerly Conkey's Roup Remedy)—Keep it on hand for use in emergency, or put it in drinking fountains on cold rainy days or when there is a sudden change in weather. Pkgs., 25c, 50c, \$1.00; 1½ lb. can, \$2.35; all postpaid; 5 lb. can, \$5.00; \$5.75, postpaid.

CONKEY'S PILLS—(Formerly called Conkey's Roup Pills)—Administer these pills twice daily, in extreme cases three times a day. Pkgs., 25c, 50c, \$1.00, all postpaid.

CONKEY'S DIATEX—Formerly called Conkey's White Diarrhoea Remedy)—An astringent tablet for drinking water of poultry and baby chicks. Play safe—keep this remedy in the drinking water of all baby chicks until danger period of the first few weeks is past. Pkgs., 25c, 50c, \$1.00, all postpaid.

CONKEY'S BALMO—(Formerly called Conkey's Canker Special)—A soothing, cooling application for relieving irritation around the swollen eyes and head and in the mouth when treating conditions caused by colds and similar troubles. Pkgs., 50c; pint, \$1.20. All sent carrying charges extra.

CONKEY'S SALVO—(Formerly called Sorehead remedy) Good to have on hand for treating sores, cuts and wounds of any description. Pkg., 25c or 30c, postpaid.

CONKEY'S POULTRY WORM REMEDY—(For large round worms)—Worms cause great loss and flocks should be treated regularly. Pkgs., 25c, 50c, or 30c, 55c, postpaid. Breeder size (5 lbs.) \$2.75, or \$2.85, postpaid.

CONKEY'S SCALY LEG REMEDY—An excellent application for removing this unsightly condition. Pkg., 25c, or 30c, postpaid.

CONKEY'S LICE POWDER—(Contains sodium fluoride)—For dusting hens, nests, growing chicks, and for use wherever body lice must be overcome. Pkgs., 35c, 75c; 12 lb. pails, \$2.60; 25 lb. pails, \$5.00. Parcel post, express or freight extra.

CONKEY'S HEAD LICE OINTMENT—For overcoming and preventing the murderous head louse which causes loss of so many hen-hatched chicks. Pkgs., 10c, 25c, or 30c, 30c, postpaid.

CONKEY'S NOX-I-CIDE—(Dip and Disinfectant)—Every poultry yard, farm, home, factory, stable, store, office building—in fact, every place where sanitation is necessary to health—needs Conkey's Nox-I-Cide every day in the year. Pint, 50c; quart, 80c; half gallon, \$1.30; gallon, \$2.00; 5 gallons, \$9.25; 10 gallons, \$17.75. Express or freight charges extra.

CONKEY'S POULTRY TONIC—Conkey's Poultry Tonic helps birds to get more out of their feed; they produce more eggs and better flesh on LESS FEED, through better digestion and assimilation. Conkey's Tonic is all medicine—free from filler, red pepper and "hot stuff" to over-stimulate the birds and break down their health. Pkg., 1½ lb., 25c; 3¼ lb., 50c; 25 lbs. pails, \$3.00; 100 lb. bags, \$10.50. Parcel post, express or freight charges extra.

CONKEY fed chicks are lucky fellows. They just naturally outlive and outgrow chicks raised on other feeds. This ready prepared mash contains all the elements needed for safely starting baby chicks, ducklings, goslings, poult, guineas, pheasants and all self-feeding young fowls.

This superior chick mash was the first commercial poultry feed containing buttermilk—that is why we call it the ORIGINAL buttermilk starting feed.

It is a scientifically-balanced feed as clean and wholesome as "infant food." Selected, plump grains, ground to proper fineness, are combined with other ingredients so as to make the feed readily digestible, palatable and nutritious. TASTE it, SMELL it, that's the way to judge a chick feed.

Feed It The First Six Weeks

Conkey's is all the chicks need the first 6 weeks except greens, charcoal, grit, clean water and some fine scratch grains in the litter for exercise. Give grit and water from the start. During the second week add green stuff and in the fourth week finely cracked grain, like Conkey's Chick Grains.

Packed in convenient sizes from 2½ lbs. up. Buy 1½ lbs. for each chick.

Ingredients—Crude Protein, 14%; Crude Fat, 3%; Crude Fibre, 4%; Nitrogen Free Extract, 60%; Carbohydrates, 64%.

Analysis—Semi-Liquid Buttermilk, Corn Meal, Corn Feed Meal, Oatmeal, Wheat Middlings, Raw Bone, Blood Flour, Meat Meal, Dried Milk Albumen, Salt ½%.

Y-O (Cod Liver Oil, Yeast, Soy Bean Oil Meal, Wheat Middlings, ¼% of Red Oxide of Iron).

CONKEY'S Y-O—Yeast with Cod Liver Oil—There is nothing finer than Conkey's Y-O to mix in with poultry mashes. Absolutely indispensable in raising chicks in backward season with little or no sunshine, as it is rich in vitamins A and D (the "sunlight vitamins"). In addition, the B vitamin in Y-O insures complete, rapid development, giving birds capacity and stamina for future production. Wonderful for growing stock. Absolutely necessary for continued heavy egg production as it replaces the vitamins used up in forming rich egg yolks. Hens won't break down as layers if given 2 per cent—3 per cent of Y-O with mash feed. For breeding stock, it's wonderful as it improves quality of the eggs, fertility and hatchability. Stop low hatches and high chick mortality by mixing Y-O with the mash feed.

Owing to the fluctuating prices we are unable to quote on Poultry Feed.

SUPTO PRODUCTS

SUPTO C. C. TONIC is more than just a disinfectant. It is a tonic that stimulates digestion, neutralizes gas, aids digestion and builds up the blood stream. Vegetable oils are so combined in this product to make it one of the greatest tonics ever known. A flock of baby chicks given SUPTO C. C. Tonic to maturity will not be bothered with worms.

SUPTO C. C. Tonic proves itself. After the first or trial order it sells itself by results. There is no guess work about what SUPTO C. C. Tonic will do. White Diarrhea infested chicks and chicks with coccidiosis have been saved.

Quart, \$1.75; $\frac{1}{2}$ gallon, \$3.25; 1 gallon \$6.00.

F. O. B. Wichita

Supto C. C. Special for Worms

The entire flock is given SUPTO C. C. SPECIAL in the drinking water. It acts as a vermifuge. Worms are dislodged from the intestinal lining by drugs imported from the orient and compounded in SUPTO C. C. SPECIAL. The intestinal lining is healed by soothing oils and digestive action is stimulated to such an extent that the protein in the worms is assimilated just as any other food and the waste material is passed off. The worms are digested in place of expelled, which means that other fowls cannot pick them up and become infested as happens when capsules are used.

We advise one quart of SUPTO C. C. SPECIAL for every 25 mature birds.

Quart, \$1.85; $\frac{1}{2}$ gallon, \$3.50; 1 gallon, \$6.50.

F.O.B. Wichita

Nopco Cod Liver Oil

The successful poultryman knows that Vitamin D in an otherwise well-balanced ration pays for itself many times over—in lowered mortality, in healthier growth, and finally in increased production. He knows that he CAN afford this essential factor and he supplies it the year round to his birds—chicks, pullets, layers—in the surest form which is NOPCO COD LIVER OIL FORTIFIED IN VITAMIN D POTENCY.

Not to afford this protection is to run the chance of losing part of a year's income.

Much of the money which is spent by poultrymen comes under the heading of expense—necessary to be sure, but still an expesse. Money spent for NOPCO FORTIFIED is purely and simply an investment in

\$2.50	Lowered mortality More rapid and healthier growth	\$2.50
Per Gal.	Increased egg production	Per Gal.
F. O. B. Wichita	Better eggshell texture	F. O. B. Wichita

ALL PROFIT ITEMS

CARBOLA is non-poisonous and non-caustic. It is applied with a brush or sprayer and dries pure white. Does not flake or peel off. Carbola kills both germs and vermin. Clean up your poultry houses and paint the walls, roosts, and nest boxes with Carbola. One pound of Carbola makes one gallon disinfecting whitewash cover 200 square feet. Can be sent by mail. Add postage. 5 lbs., 75¢; 10 lbs., \$1.25; 50 lbs., \$5.25.

Avenarius Carbolineum

Kills Chicken Mites in Poultry Houses. Apply once a year. GUARANTEE—We guarantee that one thorough application of Avenarius Carbolineum either by brush or sprayer to the interior walls, dropping boards, roosts, etc., to such buildings, after a previous cleaning and no matter whether they are of wood, tar paper, or plaster, will exterminate mites in the same FOR A WHOLE YEAR.

You can make a good fly spray by using one part of Avenarius Carbolineum to three parts of machine oil. It is an excellent disinfectant in hog pens and is also used for general stable disinfection.

One-gallon cans, \$1.75, F. O. B., Wichita.

"Black Leaf 40"

"BLACK LEAF 40" works while they roost. Delouse entire flock by "Painting" the roosts with "Black Leaf 40." Any recommendation which the Tobacco By-Products & Chemical Corporation makes regarding the use of any of its products is based upon experiment station evidence and upon very careful tests. Experiment station authorities have endorsed "Black Leaf 40" for insect control on farm and orchard crops for nearly twenty years. Poultry men may therefore have absolute assurance that this new control for poultry body-lice with "Black Leaf 40" is a tested, proven and dependable treatment.

Easy to Apply "Black Leaf 40" Whether for Fifty or Five Thousand Fowls

One ounce of "Black Leaf 40" will "paint" about 12 to 15 running feet of roost; or one pound to 190 to 240 feet. "Paint" the undiluted "Black Leaf 40" on the top of the roosts and cross-arms, about half an hour before the birds perch for the night; on warm still nights in the fall, spring, or summer.

Some run a line of undiluted "Black Leaf 40" on the top of the roosts with an oil can and spread it with a feather. In coops with wire bottoms, apply "Black Leaf 40" to wire bottoms with a paint brush.

Avoid cross-draughts when the treatment is applied, so that the fumes of "Black Leaf 40" are not immediately blown away but have opportunity to penetrate the feathers thoroughly.

Lice eggs hatch in 6 to 8 days. The killing effect of "Black Leaf 40" lasts for some days after the treatment. Some experimenters state that one application of "Black Leaf 40" to the roosts will remain effective long enough to kill the young lice when they hatch from the "nits" or eggs. In any event, since the treatment is so cheap, the second application 10 days after the first can easily be made if desired.

MITES

In addition to controlling body-lice, "Black Leaf 40" is also effective when applied as a spray against poultry mites. Diluted "Black Leaf 40" at the rate of about one tablespoonful to one gallon of water (a dilution of 1 to 250), plus about one-half ($\frac{1}{2}$) ounce of ordinary laundry soap. Dissolve the soap in hot water. Spray with good pressure over the roosts, walls, nests, dropping boards and other places in which the mites hide during the day.

"BLACK LEAF 40"

Each
1-oz. bottle (Treats 12 to 15 running feet of roost) \$.35
5-oz. bottle (Treats about 100 running feet of roost) 1.00
1-lb. bottle (Treats about 200 running feet of roost) 2.25
2-lb. Tin (Treats about 400 running feet of roost) 3.35
5-lb. Tin (Treats about 1,000 running feet of roost) 6.25
10-lb. Tin (Treats about 2,000 running feet of roost) 10.75
50-lb. Drum (Treats about 10,000 running feet of roost) 47.50

(F.O.B. Wichita)

Unmailable. Can ship by express.

NIP-AN-TUCK ROACH POWDER

Odorless—Stainless
Nips the Cockroaches

Whether they eat it or only come in contact with it, death is sure.

NIP-AN-TUCK

Must do the work just as you expect it or your money will be cheerfully refunded.

Full Size 16 oz. Can \$1.00 Postpaid.

Ross' Sure Egg Feeds

We manufacture and Sell ROSS' SURE EGG MASH and ROSS' SURE EGG SCRATCH Feeds. These feeds are properly balanced to produce feathers, eggs, and also to maintain the hen in perfect physical condition. The only things necessary to do this, in addition to feed, are Grit, Crushed Oyster Shells, and plenty of fresh water. When fed in the ratio of 200 lbs. Ross Sure Egg Mash and 100 lbs. Ross Sure Egg Scratch, or 2 to 1 ratio, the hens will be supplied with the necessary ingredients to insure an even number of whites and yolks of the egg. This means more eggs from each hen in the same number of days.

ROSS' SURE EGG MASH

8½ lb. Sack

25 lb. Sack

50 lb. Sack
Ask for Prices

100 lbs.

ROSS' SURE EGG SCRATCH

We can supply these feeds in large quantities and will name lowest quantity prices on receipt of your inquiry.

Conkey's Feeds

CONKEY'S CHICK STARTER—With Buttermilk and Y-O
CONKEY'S ALL MASH with Y-O. For battery brooder feeding and the first three weeks, to be followed with Conkey's Growing Mash to maturity
GECCO GROWING MASH—With Y-O
GECCO BABY CHICK GRAINS
CONKEY'S GROWING GRAINS
CONKEY'S EGG MASH—With Y-O
ROLLED OATS (Oatmeal)

5 lb. Sack 10 lb. Sack 25 lb. Sack 50 lb. Sack 100 lb. Sack

Ask for Prices

GERMACO HOTKAPS

Protects Plants from Frosts for Earlier Crops and Higher Prices

Germaco **HOTKAPS** are patented wax paper cones that completely cover each plant—the only way to fully protect them from frost. They are an "individual hothouse for each plant," protecting them not only from frost, but from wind, rain, ground-crusting, and insects as well. This is your assurance of earlier, bigger crops and early-to-market prices.

HOTKAPS are quickly and easily "set." They are placed with the aid of the Germaco **HOTKAP** Setter and Tamper. Thousands of progressive farmers in every state are now regular users of this modern crop necessity. They are getting bigger, hardier crops and greater profits than ever before.

Prices: Home package for backyard gardens, 100 Hotkaps, including Garden Setter with Tamper, \$2.50, postpaid. Trial package, 250 Hotkaps, including Garden Setter with Tamper, \$4.00, postpaid. Garden Setter alone, 50c, postpaid.

Prices F.O.B. Wichita

Lots of 1000 or over, \$11.50 per 1000; 5000 or over, at \$11.00 per 1,000; 10,000 or over, at \$10.75 per 1,000. Shipping weight 26 lbs. per 1,000. Packed 1,000 to the roll. Steel Hotkap Setter, \$2.50, weight 3 lbs.

NO ORDER ACCEPTED FOR BROKEN PACKAGES

HOME GARDENERS will find the Home Hotkap Package ideal for their use and an inexpensive method of insuring earlier gardens. It provides protective Hotkaps for 100 plants and Hotkap Setter and Tamper to make the work easier and properly applied. Be sure to include the Home Hotkap Package in your order. Price \$2.50, postpaid.

Peat Poultry Litter

Clean, sanitary, dry, cool in summer, warm in winter, covers droppings and takes up moisture quickly, keeps insects away, odor is arrested, useful in brooders and brooder houses. One bale will cover 350 square feet of floor 1½ inches. Bale \$3.75; 3 bales for \$10.80; 5 bales for \$17.25. F. O. B. Wichita.

THE HARRIS PLANT BANDS

The Handy Paper Band

These paper bands are most easily handled in flats or shallow wooden boxes about 4 or 5 inches deep, 12 to 18 inches wide, 18 to 20 inches long. Sift a half-inch layer of soil over the bottom of the flat, shape into the square form and press into the soil in rows immediately touching each other. Soil is then sifted over the bands until they are filled. They can be firmed down by shaking the flat.

When you are ready to transplant your plants to the garden, you can take bands up from the flat and plant directly into the garden soil. The plants will be moved from one location to another with no disturbance to the roots and the plants will never show any ill effects from their transplanting.—From Successful Farming.

All bands packed 250 to a carton, weighing about 3 lbs. F.O.B. Wichita.

BANDS				
No.	Size	Depth	Per 1000	Pkg. of 250
1½ B	1½ x 1½	2½	\$3.80	\$1.25
2 B	2 x 2	2½	4.30	1.50
3 B	3 x 3	3	6.10	2.00
4 B	4 x 4	3	7.45	2.25

BANDS WITH FOLDING BOTTOMS OR POTS

Can be used as an extra deep band by leaving bottom unfolded. By pushing the flaps in you have a square pot with bottom.

2P	2x2	2½	\$4.80	\$1.75
3P	3x3	3	7.50	2.25
4P	4x4	3	8.65	2.50

GATOR-HIDE MULCH PAPER

Does Away With Cultivation, Makes Maximum Yields

Gator-Hide Mulch Paper comes in rolls 18 inches and 36 inches wide and 150 and 300 lineal yards. Unrolled directly over the proposed plant beds and anchored by soil, or other available material, along its free edges, Gator-Hide Mulch Paper practically imprisons all moisture in the soil and gives it up in the form of stimulus to plant life rather than in the form of evaporation to the sun. Mulch Paper increases the temperature and the consequent bacterial activity of the soil both by conserving solar heat and by decreasing the cooling action that ordinarily results from evaporation. Planting is accomplished THROUGH openings made in the paper at suitable space intervals or BETWEEN strips of the paper. Thus, while space in plenty is provided for the growth of the plant, space is absolutely denied for the growth of weeds.

Write for Free Booklet, "THE MIRACLE OF MULCH PAPER"

PRICES—Type A, for Annuals, primarily in field culture. Type B, for Perennials in field culture and all garden work.
 Type A Rolls, 18 inches wide, 150 lineal yards to roll (approximately 30 lbs.) \$3.50 roll
 Type B Rolls, 36 inches wide, 150 lineal yards to roll (approximately 60 lbs.) 7.00 roll

DISCOUNTS 30 to 100 rolls, 18 inch width 5% off
 100 to 500 rolls, 18 inch width 10% off All 36 inch rolls counted as two rolls.

Small Garden size rolls, 45 lineal feet—18 inches wide, \$1.00 roll, \$1.25 postpaid.

Niagara Spray Dusts

Dust spraying materials are being used by more people each year. They give most effective control of many insects, blights, fungus, are easy of application, require small space for storage of materials and sprayers. They give best results when applied on dry plants, shrubbery, etc.

ALL-IN-ONE DUST—Controls chewing and sucking insects, mildew, and other fungous. A fine dust, does not clog dust-sprayers. 1 lb. can, 75c each; 5 lb. can, \$2.25 each.

COPPER and LIME DUST No. D-6—Very useful and practical control. 1 lb. can, 55c; 5 lb. can, \$1.50 each.

COPPER and LIME DUST No. D-20—With Calcium Arsenate. 1 lb. can, 65c each; 5 lb. can, \$1.65 each.

Above All F. O. B. Wichita

PEAT MOSS

PEAT MOSS—Is a light-brown color material formed many, many years ago from both growth and decay of mosses in and along the shores of fresh water lakes in Northern Europe. It is a soil medium that is free from fungus and free from weed seeds, highly absorbent, redemptive of moisture, rich in carbonaceous matter. The continuous use of Peat Moss for many years, by European gardeners has demonstrated its superior value in building up and improving soils of various kinds, under varying conditions. The result of some years of experience with Peat Moss in America has met with success quite equal to that of European horticulturists. Peat Moss mixed with sandy soils increases the moisture holding capacity. Plant foods native, or applied, are prevented from leaching and washing away as they otherwise would. Peat Moss, when carefully worked into the soil, greatly improves its physical condition. Heavy clay is lightened and loosened so, the fine feeding roots of plants are able to penetrate it widely and deeply, to obtain an abundance of nourishment needed to produce vigorous plants and good crops. The effect also is to increase the helpful bacteria and to greatly improve soil aeration. Peat Moss also tends to increase both the nitrogen and humus content of soils. With the recent advancement in the manufacture of Plant Foods of high analysis, burning and injury through improper use may be prevented by mixing them thoroughly with Peat Moss before applying. This assures a more even distribution and it also tends to prevent leaching, so the plants derive more benefit from a given quantity of Plant Food. The strong root growth, which plants attain in soils treated with Peat Moss means more robust plants better able to resist drouth and attacks of insects and disease. More flowers and fruit are produced and earlier. A simple test may be made by planting two young plants, one in ordinary soil, the other in soil with which one-quarter to one-third Peat Moss has been well mixed. In a short time a decided difference will be seen in favor of the one benefiting from the use of Peat Moss. We will put up Peat Moss in small packages in addition to the regular bale of about 150 lbs. and measuring 17 to 20 bushels to the bale. 5 lb. pkg., 50c; 10 lb. pkg., 75c; 25 lb. pkg., \$1.25; Bale \$4.00, each. F. O. B. pkg., 50c; 10 lb. pkg., 75c; 25 lb. pkg., \$1.25; Bale \$4.00, each. F. O. B. Wichita. Ask for price in larger quantity. Also ask for folder on Peat Moss for lawns, gardens, etc.



The Leaf-green Dust. An easy, effective way to protect your roses and other flowering plants against insects and Fungus diseases without making the treatment conspicuous.

Dusting with "leaf-green" Pomo-Green is the protective method used by experts! Best for your garden, too. Pomo-Green is the celebrated Massey Dust made more toxic and colored green.

ROSES—Black Spot, Mildew or Chewing Insects are bound to appear. Pomo-Green prevents and controls these insects and diseases quickly and effectively.



1 Lb. Can



5 Lb. Carton

FLOWERING PLANTS—Pomo-Green is a specific for the control of Snapdragon Rust, Carnation Rust, Sweet Pea Mildew, Phlox Mildew, Lilac Mildew and many other fungus diseases of flowering plants and shrubs.

Protect new growth by dusting with Pomo-Green once each week throughout the growing season. 1 lb. can, 50c; 5 lb. carton, \$2.00. F. O. B. Wichita.

We can supply the latest and most favored Dust Sprayers, in all sizes. See page 53.

On pages 60, 61, 63 you will find other insecticides, fungicides and pest-destroyers.

“Black Leaf 40”

Kills by Contact and Fumes

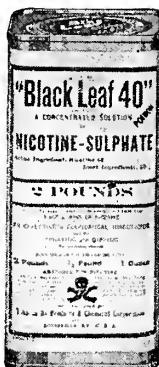
“Black Leaf 40” was the first brand of Nicotine Sulphate containing 40% of nicotine ever placed on the market. It was the product used in the original spraying and dipping tests and demonstrations by which the status of concentrated Nicotine Sulphate as an insecticide was established.

“Black Leaf 40” furnishes the two-fold effect of killing insects not only by actual “contact” but also by its fumes and vapors supplies an extra measure of protection. When “Black Leaf 40” is mixed with Lime Sulphur, Bordeaux, Calcium Caseinate, or with soap alone, the Nicotine Sulphate is converted into volatile nicotine with “gassing” properties. Spray oils, emulsified sprays or any other non-volatile insecticides kill only by actual contact with the insects. Such sprays do not possess the gassing effect that nicotine has, to assist in the kill.

“Black Leaf 40” controls soft-bodied sucking insects such as Green Aphis, Black Aphis, Rosy Aphis, Mealy Aphis, Woolly Aphis, Psylla, Thrip, Leaf-Hopper, Red-Bug, Green-Bug, and other insects of like nature which secure their food by sucking plant juices from within the interior of the plants which they attack.

Contents of Package				
1 ounce bottle	.....	\$ .35	2 pound tin	\$ 3.35
5 ounce bottle	.....	1.00	5 pound tin	6.25
1 pound bottle	.....	2.25	10 pound tin	10.75
50 pound drum				\$47.50

F. O. B. Wichita, by Express or Freight Only.



It Is Easy to Control Insects with SHEPS PLANT SPRAY

This NON-POISONOUS spray gives positive protection against both sucking and chewing insect pests, including Aphids, Thrips, Green Flies, White Flies, Mealy Bugs, Worms, Caterpillars and others. Harmless to humans, birds, animals and pets. Will not injure the most delicate plants. Benefits soil and foliage. Absolutely the easiest spray to mix—no soap-sud solution, perfect emulsion—20 seconds from bottle to plant.

PRICES

2 oz. bottle (makes 4 gals. Spray Sol.)	\$.35
8 oz. bottle (makes 16 gals. Spray Sol.)	.75
Quart can (makes 64 gals. Spray Sol.)	2.00
Gallon Can (makes 256 gals. Spray Sol.)	6.35
5-Gal. Can (makes 1280 gals. Spray Sol.)	30.00

Bulk Prices Quoted on Request.

Tree Tanglefoot

A perfect safeguard for trees and vineyards against Gypsy, Brown-Tail, Tussock Moth Caterpillars, Canker Worms, Cut Worms, Ants and other creeping insects.

It will remain sticky about three months fully exposed to weather. Tree Tanglefoot remains sticky during the entire creeping period of Gypsy, Brown-Tail, Tussock, and Canker Worms.

Tree Tanglefoot repels or traps creeping insects at any temperature between freezing and 110 degrees Fahrenheit. Tree Tanglefoot works equally as well during rain storm as before and after one. To protect against all of the above named insects, apply in this locality about March 1. For Canker Worms make bands 3 to 4 inches wide, for other insects, 2 to 3 inches wide around the tree, fully 1-16 inch thick, high enough to be out of the way of children and animals. 1 lb. can, 60c; 5 lbs., \$2.75; 10 lbs., \$5.25; 25 lbs., \$11.00.

Kills Ants in the Nest

New Methods “Gets” Them at Their Source—Safe, Permanent Effective.

The Antrol system is adapted to any size house or garden, and quickly destroys all species of sweet-eating ants. It is composed of small glass containers partially filled with special syrup and placed about the outside edges of the house or along ant “trails” in the garden. The ants smell the syrup, eat it, and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed. The complete system should cover every fifteen feet around the outside of the house or ant “trails” in the garden. Once installed, permanent, effective, and safe protection is insured from these annoying pests. Prices—Antrol sets containing four containers and one 4-ounce bottle of syrup, 95c; Antrol extra containers (each), 15c; Antrol syrup, 4-ounce bottles, 45c; pints, 95c; gallons, \$3.75.



Ever Green can be used with lead arsenate, copper sulphate, or other fungicides, excepting those containing lime. 1 oz. bottle, 35c; 6 oz. bottle, \$1.00; 16 oz. bottle \$2.00; 32 oz. bottle, \$3.50; 1 gallon bottle, \$11.50; 5 gallon bottle, \$45.00.

Inoculate

ALL LEGUMES

Alfalfa, All Clovers, Soy Beans, Cow Peas, Vetch, Peas, Beans, Peanuts with

All Legume
Germs Are
Perishable

To Protect You
NITRAGIN Cans
Stamped With
Expiration Date



THE ORIGINAL LEGUME INOCULATOR Guaranteed Fresh Each Year—Leads in High Germ Count

For profitable results, Agricultural Colleges advise inoculation for all legume seed, because it pays well in producing larger quality yields. NITRAGIN inoculated legumes draw their nitrogen from the air—not the soil—with billions of fresh, efficient nitrogen-gathering germs. It's fresh each year—it's DATED, and leads in High Legume Germ Count. Quality inoculation is the cheapest legume crop insurance known.



Alfalfa, All Clovers	
Size	Price
1/4 bu.....	\$.40
1/2 bu.....	.60
1 bu.....	1.00
5 bu.....	4.75

*When ordering
always specify
kind of seed*

NITRAGIN PRICES

Peas, Vetch, Beans, Austrian Winter Peas	
Size	Price
1/2 bu.....	\$.40
1 bu.....	.60
*1 1/2 bu....	.90
3 1/2 bu....	1.80
5 bu.....	2.50

**Also called "100
lb. size."*

Soy Beans and Cow Peas	
Size	Price
1 bu.....	\$.40
2 bu.....	.70
5 bu.....	1.50
10 bu.....	2.50

*When ordering
always specify
kind of seed*

Garden Nitragin—Garden Size— Peas, Beans, Sweet Peas

Inoculates from 1 ounce to 8 lbs. seed. Price, \$2.25
IMPORTANT: When ordering NITRAGIN, always be sure to state kind of legume seed you wish to inoculate.

Nitragin Has Served the American Farmer Since 1898

Mixing Nitragin with Seed

Legume Germs die rapidly when dried. NITRAGIN, containing between 30%—49% moisture, will readily stick to the seed without adding water, and give inoculation. However, for best results, the preferred practice, recommended by The Nitragin Company and Agricultural Authorities is to use water when mixing legume culture with seed.

APHICIDE KILLS APHIS

Aphicide is the result of careful investigations and experiments to combine nicotine with a special combination dust carrier which permits the application of nicotine in a smoky dust. This dust is so fine that it resembles smoke and penetrates even to the underside of the leaves.

Melon and cucumber growers should keep Aphicide on hand at all times and be prepared to kill the aphis as soon as they appear.

Aphicide No. 10 kills Onion Thrips. This dust when blown on the plants reaches the Thrips readily and kills them; resulting in thrifty plants when otherwise the crops might be destroyed.

It is very effective on the Striped Cucumber Beetle. Cannot be mailed.

Price: lb., 45c; 2 lbs., 80c; 25 lbs., \$6.50; 100 lbs., \$25.00, F. O. B. Wichita.

"43" Will Save Your Trees"

"43" for the Tree is a scientifically prepared plastic compound that makes easy the problem of tree care. It is ready for use at any time. A quick, easy application forms an elastic, waterproof coat which keeps out water, air, infection and decay.

PRICES: 1 lb. can, 65c; 2 1/2 lb. can, \$1.55; 5 lb. can, \$2.95; 10 lb. can, \$5.75; 50 lb. can, \$23.00; 100 lb. can, \$38.00, F.O.B. Wichita.

POT LABELS

	100	1000
4" plain wooden	\$.50	\$ 2.75
3 1/2" wooden, copper wired	.60	3.50

TREE LABELS



"Gold Leaf" Tobacco Powder

CONTROLS POULTRY ROUND WORMS

"Gold Leaf" Tobacco Powder is especially manufactured for this poultry purpose. So certain is its action that it may well be considered a specific for the control of this trouble. The treatment is inexpensive.

Mix two pounds of "Gold Leaf" Tobacco Powder with 100 pounds of dry mash. With the large 100-lb. bag, 800 birds can be treated for about 12 cents per day, or at the rate of about 70 birds for one cent a day, during the treatment period.

"Gold Leaf" Powder contains not less than 1% of nicotine or more than 1.5% of nicotine, and is suitable fineness for feeding to poultry.

"Gold Leaf" Tobacco Powder will retain its nicotine strength when stored in a dry place. Ordinary tobacco dust loses strength with age. 2-lb. package, 25c. 35c postpaid.

Snarol is a ready-prepared meal that you simply broadcast on the ground, under the vegetation. These pests eat the meal, and are quickly destroyed.

Snarol will not deteriorate from rain or sprinkling, and also is non-injurious to vegetation when used according to simple directions.

These features distinguish it from ordinary controls, and make Snarol popular with professional gardeners and nurserymen. Prices—One-pound packages, 45c; 3-pound packages, 95c; 15-pound bags, \$3.50; 50-pound bags, \$9.50.



Snarol

SEED DISINFECTANTS

Prevent and Control Diseases---Increase Yields---
Improve Quality of Crops--Assure Your Harvest Before You Plant



This is the trade mark of the Bayer Semesan Company, Inc., which manufactures and sells the seed Disinfectants formerly made and sold by The Bayer Company (makers of Bayer-Dust) of New York and E. I. Du Pont de Nemours & Co. of Wilmington, Del.

SEMESAN JR—for seed, field or sweet corn

Applied by the simple dusting operation at the rate of 2 oz. to each bushel of seed corn, Semesan Jr. offers the cheapest and most effective form of disease insurance. It is especially effective in controlling seed-borne infections of diplodia, Gibberella and Basisporium, without harming the seed embryo in the least. Tests have shown Semesan Jr. to increase the yield even from

known disease-free seed.

Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields, these are the benefits which thousand of farmers are reaping at a cost of less than 3¢ an acre.

CERESAN—dust treatment for all small grains

Now, only one product is necessary for the seed treatment of wheat, oats, barley, rye or sorghum, CERESAN. Here is an easily applied dust treatment which has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smut of barley and oats and covered kernel smut of sorghum.

This is the only dust treatment which has successfully controlled all of these grain diseases as well as being the first effective dust disinfectant to be offered the farmer for control of barley stripe and smuts. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

SEMESAN BEL—for treating seed potatoes

Instead of using chemicals for treating your seed potatoes which require tedious soaking and which sometime injure the seed piece, use the quick, easy, time-saving Semesan Bel treatment. Simply mix, dip, drain, dry and the potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Does not injure sprouts. No hot water necessary. A quick dip into the Semesan Bel solution

and the seed potatoes are covered with a protecting film of disinfectant which effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop of potatoes is bigger and of better quality. Crop increases of from 10 to 15% are common. One pound treats 16 to 20 bushels of seed.

SEMESAN—for flower and vegetable seeds

Semesan is indispensable to those growing vegetables or flowers whether for market or home use. It may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to any disease organism that may be on the seed. Semesan is such a powerful and effective

disinfectant that seed treatment with it is ridiculously low in cost, from $\frac{1}{4}$ to 1¢ per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off, the Brown Patch disease which affects golf greens and such devastating gladiolus diseases as hard rot and scab.

NU-GREEN—A scientifically correct treatment for keeping lawns and golf greens luxurious and healthy.

To prevent Brown-Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown-Patch season, apply a solution of 1 pound Nu-Green to 50 Gallons water. Use at the rate of 50 gallons of Nu-Green solution to 1,000 square feet of turf, including the approach and border. To cure Brown-Patch where no preventive measures are used and Brown-Patch appears, apply immediately a solution of Nu-Green in the proportion of one pound Nu-Green to 35 gallons water. Use at the rate of 50 gallons Nu-Green solution to 1,000 square feet of turf.

Prices of NU-GREEN

3 oz. tin	\$ 0.50	25 lb. pail	37.50
1 lb. tin	2.00	100 lb. drum	145.00
5 lb. tin	9.00	300 lb. drum	420.00

Prices of SEMESAN JR.

4 oz. tin	\$ 0.50
1 lb. tin	1.75
5 lb. tin	8.00
25 lb. pail	31.25
100 lb. drum	120.00
300 lb. drum	345.00

Prices of SEMESAN BEL

4 oz. tin	\$ 0.50
1 lb. tin	1.75
5 lb. tin	8.00
25 lb. pail	31.25
100 lb. drum	120.00
300 lb. drum	345.00

Prices of CERESAN

1 lb. tin	\$.75
5 lb. tin	3.00
25 lb. pail	12.50
100 lb. drum	49.00
300 lb. drum	144.00

Prices of SEMESAN

2 oz. tin	\$ 0.50
1 lb. tin	2.75
5 lb. tin	13.00
25 lb. pail	56.25
100 lb. drum	220.00
300 lb. drum	645.00

These Are All Poisons and Cannot Be Mailed

Read What These Users Say

Better, Quicker Germination
"I found that Semesan Jr. greatly helped in quick and better germination. In fact had some corn 'break ground' in 3 days—and made a better stand than I expected as the 'vitality' of most seed corn last spring was much below normal."—J. A. Gilfillace, Fort Lupton, Colorado.

43% More No. 1's

"You may imagine my surprise when on weighing the potatoes I found that the Semesan Bel treated rows yielded 43% more clean and salable No. 1's than did the untreated rows."—C. D. Kalbus, San Benito, Texas.

Controls Damping Off

"I have always had trouble with peppers damping-off. One application of Semesan this year and I haven't lost more than a dozen out of about 25,000 plants. It can't be beat."—John Mach, Inkster, Michigan.

Better Glads

"We soaked Gladiolus bulbs and bulbets in Semesan before planting and never had such sprouting since we began growing them. The stock came out of the ground this Fall in perfect shape in nearly all instances."—Harold I. Perrin, Sarrent, Nebraska.

Treat All Farm, Flower and Garden Seeds Before Planting

ACME INSECTICIDES FUNGICIDES



Acme Garden Guard

A garden insecticide and fungicide for use as a dust. No water, no mixing, no muss.

For use on:

Cabbage, cauliflower, tomato plants, melon vines, currants and gooseberries and other vegetables, flowers and shrubs of many kinds.

Prices: 1 lb. sifter carton 25c; 5 lb. 65c.



Acme Arsenate of Lead

The most favored arsenical insecticide found on the American market. It is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray.

The use of Arsenate of Lead for grub-proofing lawns, golf courses, etc., is growing rapidly. Ask for pamphlet telling how to do this.

Prices: $\frac{1}{2}$ lb. 25c; 1 lb. 45c; 4 lbs. 90c; 100 lbs. \$16.00.



Acme All Round Spray

The latest improvement in the insecticide field; one product which will combat blight and fungous diseases, control sucking insects and destroy chewing insects in one application. Acme All Round Spray contains nicotine sulphate to control sucking insects (plant lice and aphids), Arsenate of Lead to control chewing insects, Bordeaux Mixture to control blight and fungous diseases. Safe to use on almost all fruits, vegetables, flowers and shrubs. Write for descriptive circular. Spray Chart in each Package.

Prices: $\frac{1}{2}$ lb. 45c each; 1 lb. 95c each.



Acme Paris Green

A rich, emerald color and of fine fluffy physical character. Containing 55% arsenious oxide, it will give quickest control where extreme measures are necessary.

For use on:

Potatoes, cotton, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary.

Prices: $\frac{1}{2}$ lb. 20c; 1 lb. 50c; 5 lb. \$2.25; 14 lb. \$4.65; 100 lbs. \$30.00.



Acme Bordeaux Mixture

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvest. Almost every kind of vegetable, fruit and shrub can be greatly improved by the early use of Bordeaux Mixture.

Prices: 1 lb. 40c; 4 lbs. 90c; 100 lbs. \$15.50.

CYANOGAS is a powdered material that gives off hydrocyanic-acid gas when exposed to the air. This gas is deadly to the rodent and insect pests and will kill them almost immediately. Use CYANOGAS A-DUST for Rats, Mice, Ants, Grape Leaf-Hopper, Grape Mealy Bug, Moles, Pocket Gophers, Melon Aphis, Fleas, Ground Squirrels. Full directions with each can. PRICES: 1 lb. can, 75c; 5 lb. can, \$3.00; 25 lb. can, \$10.00.

CYANOGAS FLAKES—For controlling Chinch Bugs. Use the methods recommended by your Experiment Station. PRICES: 5 lb. cans, \$3.00; 25 lb. cans, \$9.50; 100 lb. drum, \$28.50. F. O. B. Wichita.

CYANOGAS being a Poison cannot be sent by Parcel Post, only by Express or Freight.

CYANOGAS DUSTER—For applying Cyanogas A-Dust, \$1.40 each. Foot Pump, \$4.75.

Acme M-S-R Dusting Sulphur

Keep your roses free from mildew, black spot, leaf spot and other hideous fungus diseases. Acme M-S-R Dusting Sulphur is a tonic for roses, chrysanthemums, phlox, delphiniums, sweet peas, lilacs, snap dragons and carnations—to make these flowers and many other plants yield their full measure of sweetness and beauty.

Prices: 3 lb. each 45c



Acme Bait-M

An effective insecticide bait which will throw a ring of protection around shrubs, flowers and plants in garden and lawn.

For use against snails, cutworms, sow bugs, grasshoppers and many other insects which migrate along the ground.

Prices: 1 lb. 40c; 3 lbs. 65c; 15 lbs. \$2.70.



Acme Two-Way Spray

A balanced insecticide and fungicide containing 14% arsenate of lead and 83% Bordeaux Mixture. Two results with one application.

Use wet or dry on:

Apple, sour cherry, currant and gooseberry, grape, pear, plum, strawberry, pecan, bean, beet, cucumber, pepper, potato, tomato and many other fruits and vegetables.

Prices: $\frac{1}{2}$ lb. 25c; 1 lb. 45c; 4 lbs. 90c; 100 lbs. \$16.00.



Acme London Purple

Cheaper than Arsenate of Lead

A favored insecticide for 50 years. Now stronger and better than ever. London Purple is one of the lightest and fluffiest powdered insecticides on the market, assuring complete coverage and greatest adhesion to foliage.

For use on potatoes, cotton, tobacco, sugar beets and many other shrubs and vegetables affected by leaf chewing insects.

Prices: $\frac{1}{2}$ lb. 15c; 1 lb. 35c; 4 lbs. 80c; 100 lbs. \$13.50.



Acme Lime Sulfur

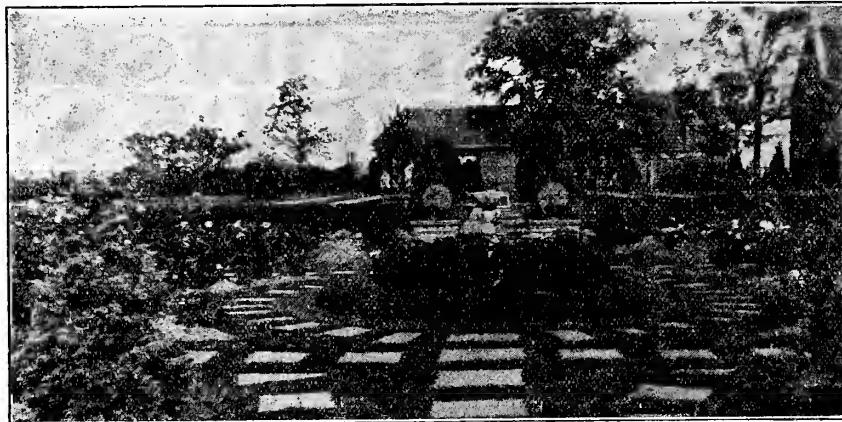
A standard 33° Baume lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water.

For use on:

Dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite.

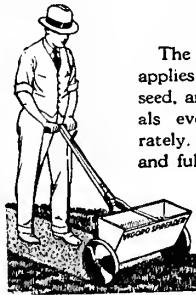
Prices: 1 lb. 35c; 5 lbs. \$1.30; 10 lbs. \$2.30; 25 lbs. \$3.85; 100 lbs. \$10.50; 200 lbs. \$19.75.





All Plant Life Must Have Food

Plants, like human beings, require a balanced diet for normal, healthy growth. The lack of a single essential element may be the limiting factor in their growth. Vigoro, the complete, balanced plantfood, contains the right amount of each food element necessary to produce rich-green, velvety lawns; large, beautiful



The Vigoro Spreader applies Vigoro, grass seed, and other materials evenly and accurately. Write for prices and full description.

*A square meal for lawns and flowers
is 4 lbs. of Vigoro
per 100 sq. ft.*

VIGORO
Complete plant food

*A Product of Swift & Company
“Use Vigoro on Everything You Grow”*

flowers; healthy, full-foliaged trees and shrubs; and early, delicious vegetables. It is “the square meal for all plants.”

Clean, odorless, and economical. Vigoro is easy to use. Simple directions for feeding everything you grow accompany each bag or package. Vigoro is used annually on 3,000,000 homes. We recommend it.

Prices:	
100-lb. Bag	\$ 5.00
50-lb. Bag	\$ 3.00
25-lb. Bag	\$ 1.75
5-lb. Pkg	\$.70
12-oz. Pkg	.15



FERTILIZERS

There are three chemical elements of plant food commonly used in fertilizers. They are nitrogen, phosphates and potash. A balanced fertilizer is one which contains all three, and gives a complete diet to the crop. And the composition of a balanced fertilizer is commonly expressed in a formula of three numbers with hyphens between, thus 4-8-4. The first indicates the proportion of nitrogen; the second, the proportion of phosphates; the third, the proportion of potash. Fertilizers will usually repay several times their cost when applied at the proper time. In addition to the complete fertilizers, or Plant Foods, "SACCO," "VIGORO," list by us, we offer these other fertilizers—known as raw chemicals, and which should be used with much care.

SULPHATE OF AMMONIA—Used for its nitrogen. Very desirable for all plants in which a large leaf development or rapid growth is desired. It tends to create an acid reaction in the soil. Do not let it touch tender growth. Use one pound to 100 square feet. 2 lbs., 25c; 5 lbs., 50c; 25 lbs., \$2.00; 100 lbs., \$6.00

MURIATE OF POTASH—Used for its ability to increase fibre development in plants, to hasten maturity of crop, and to increase the size and weight of all root crops. May be used at rate of 125 to 250 lbs. per acre. 2 lbs., 25c; 5 lbs., 50c; 25 lbs., \$1.75; 100 lbs., \$5.75.

NITRATE OF SODA—One of the cheapest forms in which to apply nitrogen to plants. Do not let Nitrate touch tender growth or it will burn. Remove the lumps before using and break them up, which can be done by pounding. For the Home Garden apply as a solution one ounce to 2 gallons of water. 2 lbs., 25c; 5 lbs., 50c; 25 lbs., \$1.75; 100 lbs., \$5.00.

ACID PHOSPHATES—(Super-phosphates)—Used on grain and other crops requiring an excessive amount of phosphoric acid. 16 per cent available, 25 lbs., 90c; 100 lbs., \$2.35; 20 per cent available, 25 lbs., \$1.15; 100 lbs., \$2.95.

STEAMED BONE MEAL—This supplies phosphorus, or phosphates, is strictly an animal product. More useful for humus than for plant food. 1 lb., 10c; 3 lbs., 25c; 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.75.

PULVERIZED MANURE—Manufactured by special process from selected fresh cleanings from cattle pens. There is no offensive odor, and when spread on the lawn and garden it works down into the soil. There will be no refuse to blow about or to be raked off. 100 lbs. of this is the equal of one-half yard of fresh, smelly manure—and should be applied 100 lbs. to 1000 square feet of lawn or garden. 25 lb., 75c; 50 lb., \$1.00; 100 lb., \$1.75.

PULVERIZED LIMESTONE—Is a neutralizer for soil acidity, also improves the texture of the soil and liberates nitrogen and other plant food, and stimulates bacterial action. Apply after the ground is plowed, or dug for a crop, scattering with a lime distributor, one ton, two tons or more to the acre. Or by hand in small gardens—about 2 handfuls to a square yard. 100 lbs., \$1.75; 500 lbs., \$6.50; 1000 lbs., \$11.00; 2000 lbs., \$17.50. Ask for price in carlots, 40 to 50 tons.

TOBACCO DUST—1 lb., 10c; 3 lbs., 25c; 5 lbs., 40c; 10 lbs., 65c; 25 lbs., \$1.50; 50 lbs., \$2.50; 100 lbs., \$4.25.

For larger quantities write for prices

SACCO PLANT FOOD

"Makes Things Grow"

This Complete Balanced Feeding Ration Contains Every Element Needed to Enrich the Soil and Nourish LAWNS, FLOWERS, SHRUBS, TREES and VEGETABLE GARDENS



You will have better success with the things you grow if you give them proper nourishment. SACCO is rich in Nitrogen, Phosphates and Potash—contains tobacco stems, humus, manganese—everything needed to help you produce a better lawn and garden. SACCO is clean, odorless and easy to use. Complete directions and a handy sifter cap for applying in each bag.

SPREADS FARTHER—LASTS LONGER—SAFE TO USE

1-lb. Can	\$.15
5-lb. Bag	.50
10-lb. Bag	.85
25-lb. Bag	1.75
50-lb. Bag	3.00
100-lb. Bag	5.00



Made by Fertilizer Specialists
for Nearly 40 Years



WEDO is a balanced fertilizer made especially for lawn grasses—not a general purpose plant food. You can expect better results when you use this special combination of organic and mineral feeding elements.

Feeds Grass — Fights Weeds

This dual purpose fertilizer produces a lawn of thick, healthy grass with a close-matted root system which in itself will crowd weeds out and deposits in the soil a residue that discourages weed development. A wonderful improvement in the appearance of the lawn will be noticed in a few days after WEDO is applied. Continued use will result in a rich, green sod that can be expected only from WEDO.

VERY ECONOMICAL

Only 1½ pounds are required for 100 square feet—about one-half the amount needed when ordinary plant foods are used.

100 lbs.	.. .	\$ 6.50
50 lbs.	.. .	3.75
25 lbs.	.. .	2.00
10 lbs.	.. .	.95

Special Fertilizer
for LAWNS only

WEDO contains the specified amount of Nitrogen, Phosphates and Potash as proven by soil authorities to be best adapted to lawn maintenance.



LAWN GRASS SEEDS AND LAWNS

FOLKS living in houses with grounds, and parkings, want a green lawn. Every piece of ground presents individual needs, requiring special treatment, to bring about a velvety-green lawn that will be a joy to the household, and a pleasure to the passer-by. In general, it is very necessary to grade the ground to a level that will prevent low spots in the lawn.

It is just as necessary for plant food to be evenly present in the soil, so the seeds will all have equal opportunity to germinate and grow to maturity at about the same time. The natural plant food of the soil may be added to by applying manure or bone meal to supply humus (this should be spaded or raked into the ground) then when PLANT FOOD is sown very thinly, at the rate of 2 to 4 pounds to 100 square feet of surface (10x10 feet) three days before seeding a new lawn, the available fertility, and the added plant food will at once go to the aid of the seeds and under average weather conditions will hasten growth. Watering lawns instead of sprinkling lawns should be considered if you expect to hold your lawn in satisfactory condition. Watering means the same thing as irrigation (saturation of the ground) while sprinkling may mean anything, depending on the person in charge of the hose, from saturation down to a mere drop here and there in the effort to cover the entire lawn within a few minutes time, therefore, it is rather easy to see why sprinkling a lawn is one of the effortless ways of destroying a good stand of grass. Refrain from sprinkling and adopt watering to preserve your stand of grass. Then carefully observe the lawn mower to find how high from the ground it will cut the grass, $1\frac{1}{2}$ to $1\frac{3}{4}$ inches is the best height for this part of the country, the blades should always be sharp enough to make a clean cut (never cut the grass with dull blades, they pull the roots loose and plants soon die) so the plants will immediately start new growth, usually the ground needs thorough watering at this time. For shaded lawns we prefer Kentucky Blue Grass, where there is no shade Bermuda Grass will grow best, Creeping Bent Grass is particularly useful for golf greens, and some people are using it successfully as a lawn grass. Our Mid-West Lawn Grass Mixture is made up of different grasses, properly proportioned to meet the need of any home owner who has had difficulty in securing a good lawn.

Ross Grass Seeds were used in seeding the large majority of the good lawns in Wichita, and in many of those in the surrounding cities and towns. The demand has increased each year, and we are trying to serve this territory in such a manner as to deserve your orders in the future.

All Grass Seeds We Offer Have Been Cleaned, Recleaned and Tested

Orders for Grass Seeds totaling \$2.00 to \$5.00 will be delivered prepaid within 300 miles of Wichita. Orders for less than \$2.00, add 5¢ per pound for postage.

MID-WEST LAWN GRASS MIXTURE—In partial shade and on light and sandy soils we especially recommend this mixture as containing the necessary grasses to meet these conditions. Use one pound to each 300 square feet. Price: lb., 40c; 2 lbs., 75c; 3 lbs., \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.90; 25 lbs., \$7.00; 100 lbs., \$25.00.

KENTUCKY BLUE GRASS—Acorn Brand; cleaned and recleaned. Use one pound to each 200 square feet. Price: lb., 50c; 2 lbs., 95c; 3 lbs., \$1.35; 5 lbs., \$2.00; 10 lbs., \$3.80; 25 lbs., \$9.00; 100 lbs., \$33.00.

KENTUCKY BLUE GRASS—Fancy. Use one pound to 200 square feet. Price: lb., 40c; 2 lbs., 75c; 3 lbs., \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.90; 25 lbs., \$7.00; 100 lbs., \$25.00.

ENGLISH BLUE GRASS—Somewhat coarser plant than Kentucky Blue Grass, should be sown one pound to 200 square feet to secure good lawn. Is hardy, a native grass of Kansas, will stand drought. Price: lb., 30c; 2 lbs., 55c; 3 lbs., 75c; 5 lbs., \$1.10; 10 lbs., \$2.00; 25 lbs., \$4.50; 100 lbs., \$15.00.



RED TOP—(Herd's Grass)—This is one of the valuable grasses for lawns, either in mixtures of grass seeds, or alone on soils where Kentucky Blue Grass does not grow well. Similar in growth to Kentucky Blue, but with smaller leaf. It luxuriates in moist, rich ground, but will thrive in almost any soil. Sow one pound to 300 square feet of land. Price: lb., 40c; 2 lbs., 75c; 3 lbs., \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.90; 25 lbs., \$7.00; 100 lbs., \$25.00.

BERMUDA GRASS is a southern grass. It delights in sunshine and warmth. It is extensively used in this section of the country for lawns. Bermuda Grass is a small creeping hardy perennial, which thrives on nearly all of our soils, though like other grasses it gives best results on the richer soils. The upright stems vary in height from a few inches to two feet according to richness of soil. The leaves, which are short and numerous, grow near the base of the plant. It grows vigorously during the hot summer months when other grasses are parched and dead. One of the chief reasons why this grass has not been more extensively used is the fact that it has been the habit to propagate it from the roots, as it does not mature seed in this section. However, it is as easy to get a good stand by sowing seed. Bermuda Grass seed should be sown in the spring, 60 to 90 days are required for the seed to germinate. The ground should be well prepared with a good, firm seed-bed, as the seed is small, and is sown at the rate of 1 lb. to each 300 square feet of ground for lawn. Do not cover more than one-half inch. Price: 1 lb., 40c; 2 lbs., 75c; 3 pounds, \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.90; 25 lbs., \$7.00; 100 lbs., \$25.00.

SEASIDE OR COOS COUNTY BENT GRASS—This Bent Grass is one of the most vigorous creepers. Spreads under ground by root stocks. Making a deep reinforced sod. Seems hardy and suited to sour soil conditions, and grows on a wide range of soils. Needs considerable care, cutting, water and fertilizer. It is slow in its creeping characteristics, but after it has done so makes a very excellent quality and color. Price: $\frac{1}{4}$ lb., 75c; $\frac{1}{2}$ lb., \$1.30; 1 lb., \$2.50; 2 lbs., \$4.50; 3 lbs., \$6.00; 5 lbs., \$9.00.

ITALIAN RYE GRASS—Similar in growth to English Blue Grass, is quite useful in grass seed mixtures, and in some localities has given good results alone. We especially recommend Italian Rye Grass seed for sowing in the fall months to insure plenty of green grass throughout the winter months. Sow one pound on each 200 square feet of ground. Price: lb., 35c; 2 lbs., 65c; 3 lbs., 90c; 5 lbs., \$1.25; 10 lbs., \$2.20; 25 lbs., \$5.00; 100 lbs., \$18.00.

GERMAN MIXED BENT GRASS—(Also Called Creeping Bent Grass)—This seed is grown in southern Germany and is a mixture of Bents containing Creeping Bent, Velvet Bent, and Rhode Island Bent. This grass requires acid soils and can be best grown when fertilized with Ammonium Sulphate, which also discourages weeds. We recommend the sowing of seed in preference to Creeping Bent Stolons for lawns, because the seeded grass does not grow so rapidly and it is easier to keep up with the mowing. Use three to four pounds of seed to each 1,000 square feet. Price: $\frac{1}{4}$ lb., 45c; $\frac{1}{2}$ lb., 80c; 1 lb., \$1.50; 2 lbs., \$2.90; 3 lbs., \$4.20; 5 lbs., \$6.75.

WHITE CLOVER—(Also Called Dutch Clover)—Desirable for lawns, makes rapid growth, we recommend sowing with other grasses at the rate of one-third Clover and two-thirds Blue Grass, because Clover germinates quickly thus protecting the tender plants of other grasses. When sown alone sow 1 lb. to 400 square feet. Price: $\frac{1}{4}$ lb., 25c; $\frac{1}{2}$ lb., 40c; 1 lb., 75c; 2 lbs., \$1.55; 3 lbs., \$2.10; 5 lbs., \$3.30; 10 lbs., \$6.50; 25 lbs., \$13.75; 100 lbs., \$50.00.

All Prices Subject to Change Without Notice

THE ROSS SEED COMPANY, Wichita, Kansas